Some Qualities Associated with Success in the Christian Ministry

STANFORD UNIVERSITY LIBRARY
APR
3
1923

By

MARY E. MOXCEY

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, in the Faculty of Philosophy, Columbia University

Published by
Teachers College, Columbia University
New York City
1922

3781
C72M
UNCLASSED
Dissertation

STANFORD UNIVERSITY LIBRARIES

Some Qualities Associated with Success in the Christian Ministry

By

MARY E. MOXCEY

Submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, in the Faculty of Philosophy, Columbia University

Published by
Teachers College, Columbia University
New York City
1922

Copyright, 1922, by Mary E. Moxcey

PREFACE

This study was undertaken as the completion of graduate work in religious education and psychology carried on in 1913–15 in the Department of Educational Psychology, Teachers College, the Department of Psychology, Columbia University, and the Department of Religious Education, Union Theological Seminary. The data, collected during the year 1916–17, represent the coöperation of a large number of people to whom the writer's thanks are most gratefully rendered. First of all were hundreds of graduates of the theological schools who took time from busy pastoral or executive or professorial work to give painstaking answers to the questionnaires. The officers and the office staffs of Boston University School of Theology, Drew Theological Seminary, and Garrett Biblical Institute showed warm interest in the project and afforded every courtesy of access to their records of scholarship grades and every facility for copying them. The librarians of Union Theological Seminary and the Methodist Book Concern were most helpful in making available the theological journals and the minutes, catalogues, and other printed material on which portions of the work are based. Especially helpful also were those members of the New York and New York East conferences who gave their judgments on the ability in four ministerial traits of their conference associates.

That this work was finally completed is in large measure due to the stimulating faith in its value of Professor George A. Coe, under whom the major courses of graduate study had been carried on. The problem of this dissertation was formulated and its solution worked out under the inspiration and direction of Professor E. L. Thorndike. To him the author is heartily grateful for unstinted generosity of interest and of statistical laboratory facilities, but more than all for training in the spirit and the method of independent research.

M. E. M.

Digitized by the Internet Archive
in 2025

https://archive.org/details/somequalitiesass0000mary

CONTENTS

INTRODUCTORY

Page

The Problem of Vocational Guidance in the Professions 1
Distinguishing Characteristics of the Ministry as a Profession 1
A. As Given by Various Writers 2
B. As Stated by an Average Church Member 4
C. Chosen and Defined for Purposes of This Study 5
Statement of General Method of Procedure 6

I

A STUDY OF MEMBERS OF THE NEW YORK AND NEW YORK EAST CONFERENCES

1. Judgments of Fellow-Ministers on 4 Distinctive Traits 7
Method of Procedure in Obtaining Numerical Judgments 7
Method of Testing Reliability of Judgments as Measures 8
Table 1. Reliability of Judgments of Associates 10
Conclusions from Table 1 10
Table 2. Intercorrelation of Traits 12
Correction for Attenuation (and Note 1, Raw-Correlations) 12
Conclusions from Table 2 12

2. A Study of the Relation of Salary to Ability 14
Sources, Selection, and Treatment of Data 14
(Note 2. Raw- and Self-Correlations) 15
Table 3. Relation of Salary and Date of Entrance to Each of 4 Ministerial Abilities 16
Conclusions from Table 3 16
Table 4. Relation of Salary to Ability (after Correction to Remove Effect of Time Element) 17

3. A Study of Conference Statistical Records 18
Scope and Limitations of Figures in the Annual Minutes 18
Method of Procedure 20
A. Choice of Data, with Reasons 20
B. Preliminary Testing of Records, 25 Pastors for 15 Years . . 21
C. Testing the Reliability of the Numbers as Measures 21
Fig. 1. Form for 15 Years' Fiscal Record 22
Fig. 2. Form for 15 Years' Pastoral Record 23
Table 5. Reliability of Increase or Decrease . . . . . Measures (by Plus and Minus Signs) 24
Fig. 3. Sample of Procedure, Increase and Decrease Percentages 26

Table 6. Numerical and Percentage Increase or Decrease . . .
Part 1. In Church Membership 27
Discussion of Results and Problems 27
Part 2. In Sunday School Membership 30
Discussion of Results and Problems 29
Part 3. In Contributions to Mission Boards 31
Discussion of Results and Problems 31
Fig. 4. Typical Budget, 15 years of City Church 33
Part 4. In Contributions to Other Benevolences 34
Discussion of Results and Problems 33
Summary of *Table 6* compared with *Table 5* 35

4. A Study of the Relation of Adjudged Ability to Recorded Achievement 35
Method of Procedure 35
(Note 3. Steps of Computations for *Table 7.*) 36
Table 7. Correlation of Abilities with Achievements. 20 Conference Men for 15 Years 37
Conclusions and Discussion 37

II

A STUDY OF GRADUATES FROM THREE METHODIST EPISCOPAL THEOLOGICAL SCHOOLS

1. Introduction 40

Direction of the Inquiry and Source of Material 40
Extent of Material and Sample Questionnaire 40
Scope and Limitations 41
Premises and Working Basis: Criticisms and Defence of Salary and Prominence as Criteria 42
Personal and Environmental Factors Measured 43
Selection of Items and Method of Procedure 44
Training Factors Measured 45

2. A Study of the Official Records of Graduates of 1902–1911 . . . 45

Boston University School of Theology
Drew Theological Seminary
Garrett Biblical Institute
Summary of Data Obtained 55
Table 8. Numerical Summary of Questionnaires Sent and Replies Received 46
Table 9. Occupations of Theological School Graduates, Status of 1917 47
Grades in Theological Schools 48
1. Boston University School of Theology 48
Table 10. Distribution of Individual Medians (Boston) . . . 49
Fig. 5. Distribution of Individual Medians (Boston) 50

2. Drew Theological Seminary 50
Fig. 6. Samples of Individual Records (Drew) 51
Table 11. Distribution of Individual Medians (Drew) 52
Fig. 7. Distribution of Individual Medians (Drew) 53
3. Garrett Biblical Institute 53
Table 12. Distribution of Individual Medians (Garrett) . . . 54
Fig. 8. Distribution of Individual Medians (Garrett) 55
Professional and Geographical Distribution of Graduates 55
1. Grades of Educational Men 56
Table 13. Boston Graduates in Educational Work 57
Table 14. Drew Seminary Graduates in Educational Work . . 58
Table 15. Garrett Biblical Institute Graduates in Educational Work 59
Table 16. Summary of Graduates in Academic Positions . . . 59
Fig. 9. Summary of Grades of Educators 60
2. Grades of Executives 61
Table 17. Boston Graduates in Executive Work 61
Table 18. Drew Graduates in Executive Work 61
Table 19. Garrett Graduates in Executive Work 62
Fig. 10. Summary of Grades of Executives 62
3. Grades of Missionaries 63
Table 20. Boston Graduates in Foreign Service 63
Table 21. Drew Graduates in Foreign Service 64
Table 22. Garrett Graduates in Foreign Service 65
Deductions from Data of Occupations other than Pastorate . . . 65
Fig. 11. Summary of Grades of Missionaries 66
Grades of Seminary Men and Ability in Four Traits 66
Relation of Seminary Grades to Abilities (39 Drew Graduates in Conference List) 67
Relation of Theological School Grades to Occupation and Income 67
Table 23. All Seminary Grades, Highest and Lowest One-Fifth 68
Table 24. Salaries of Graduates Receiving Highest and Lowest Grades 69
Fig. 12. Distribution of Salaries Received by Highest and Lowest Fifths in Scholarships 70

3. Analysis of Data Obtained from Questionnaires 72

Table 25. Physical Data from Ministers Sending Reply 72
Personal and Social Description 73
Table 26. A. Boyhood Environment 73
Table 26. B. Economic Environment 73
Table 26. C. Combination of Community and Economic Factors 73
Table 27. Early Opportunities Specified 75
Table 28. Early Responsibilities Specified 76
Individual Interests and Abilities 79
Table 29. Early Interests 80
Table 30. Early Abilities 80
Table 31. Adolescent Interests 80
Table 32. Adolescent Abilities 81

Table 33. Present Interests 81
Table 34. Present Abilities 81
Dominating Interests 82
Permanence of Interests 82
Permanence and Degrees of Ability 83
General Conclusions 83

III

A STUDY OF ESTIMATED VALUES OF CURRICULUM SUBJECTS IN COLLEGE AND THEOLOGICAL TRAINING

Introduction 85
1. Source and Extent of Data 86
2. Analysis of Total Ratings of Curricula 88
Table 35. Estimated Value of College Subjects 90
Table 36. Estimated Value of Theological Subjects 92
3. Analysis of Comparative Ratings by Special Groups 94
Table 37. Comparison of Median Ratings, College 96
Table 38. Comparison of Median Ratings, Theological 98
4. Summary and Conclusions 99

INTRODUCTORY

In our complex modern life, one of the most vital problems affecting community and personal efficiency, comfort and happiness, is that of fitting the individual to his task. To increase the number of "successes" and decrease the number of "failures" of individuals in their work is the problem of vocational guidance. Its solution involves analyzing the work to be done to determine the requirements of its various operations, and analyzing the individual to find the performances of which he is most capable.

In the fields of artisanship and manual employment this analysis of muscular and sensory requirements proceeds apace. In the professions but little accurate measurement has yet been attempted. Professor Seashore has thus analyzed the psychology of musicians, but this is a profession involving powers which are very possibly unit characters and are certainly to the average observer obviously specialized. Most professions evidently have many requirements, and a number of these are apparently common to two or more professions. Is "success" in a profession a matter of the preponderance of one ability, or of the fortunate combination of abilities?

Gowin (*The Executive and His Control of Men*) has shown certain physical and mental traits to be associated with different degrees of success in executive positions. His is avowedly a study of traits common to success in many different professions. Hollingworth's *Vocational Psychology* records pioneer attempts to measure personal traits which make up the differences in adaptability to situations and requirements of different professions.

An inquiry into factors of success in any profession must first choose some elements of that profession that are pertinent and distinctive. One profession is distinguished from another by (1) its *purposes*, (2) its *activities*, and (3) the specialized *training* required for carrying on those activities in pursuance of its purposes. How is the Christian ministry thus distinguished? What have the leaders in the ministry, and its professional journals, to say about its ideals and its standards and tests of success?

It is perhaps to be expected that a profession so long established, and with such great historic traditions, should have less to say in

defining its special functions than new, self-conscious professions like those of the social worker and the religious educator. A study of the library *Index to Periodical Literature* for the past twenty or twenty-five years shows that many articles have been published dealing with the adaptation of the theological school to altered forms of activity and altered methods of accomplishing its purposes, but the purposes and activities themselves are largely taken for granted.

In an editorial on the death of Dr. John Hall, *The Methodist Review* for November, 1898, discusses "The Tests of a Successful Ministry." Here the *purpose* of the Christian ministry is defined, "to save men and to build them up in the faith." Hence the "primary *tests* are the number of souls saved and the influence of the preacher's life and words," while "secondary tests, which are consequences of the above" are the "advancement of education, economic betterment and improvement of social life" in the community, and the minister's direct "influence on public affairs." The *means*, which are subordinate, are chiefly *preaching* and *pastoral labor*. Preaching is to be judged by its "truth and sincerity, its scholarly preparation and literary form." "It must accomplish its results by such means as approve themselves to the most thoughtful people as well as to the most pious."

Under the heading "The Significance of the Personal Equation in the Ministry" (*The Biblical World* for August, 1916), Orlo J. Price describes the "rapid differentiation of function" within the ministry due to the widening sphere of the church in recent years. He urges the church to train specialists rather than general practitioners and suggests that the tasks of the "prophet, engineer, educator" or the "preacher, teacher, business controller, music leader, community pastor and social worker" are each sufficient to demand the full time of one individual. He says that one person attempting all of these "lives below the line of personal efficiency for lack of salary." In another article, "The Theological Seminary and the Needs of the Modern Church" (*Religious Education*, October, 1916), Dr. Price sums up the church's needs as to leadership as *preaching*, *instruction*, *organization* for effective service, and *pastoral work*.

Bishop Hamilton Baynes, in the *Hibbert Journal* (16: 103) declares the work of the clergy to be "to lead the church into the land not yet occupied by common conscience, where mammon-worship and worldliness and selfish competition and chaos prevail." In the succeeding issue of the *Hibbert Journal* (16: 310) the Reverend

Joseph Wood says that "Preaching is the specialty of our vocation. It is the sermon that chiefly bears the brunt of the world's criticism of the church." He emphasizes the need to "study the listener's mind and needs rather than our own interests as subjects for sermons."

Dr. Francis J. Hall, of the General Theological Seminary of New York, emphasizes (in the *Constructive Quarterly*, 4: 748) the same idea, that the preaching function of the ministry is paramount. He recognizes the obligation to continue to seek truth till it is found and to keep "an open mind to re-open even settled questions." "But the assurance that one has found the truth in a given direction carries with it the right to teach it as undoubtedly true"; and this method of teaching is "a normal condition of its success. It is the readiness of normal folk to accept teaching confidently given that largely explains the spread of enlightenment among men in general." Apropos of this last statement may be quoted from Gowin (*The Executive and His Control of Men*, p. 45), "It may be pointed out that because in these times of reconstruction ministers as a class are too often without the clear and positive idea, hypocrisy stalks abroad in many a declining church. . . . What our social life most needs is a more clearly defined set of values with which, forward facing and positive, men and women can transact life's business with vigor."

In a recent article in the *American Journal of Theology* (16: 161) "The Contribution of Critical Scholarship to Ministerial Efficiency," Dr. George Burman Foster challenges the standards and tests that seem to be taken for granted. "The dream is of a scientific ministry instead of the old religious ministry. . . . The church is not a temple but a 'plant.'" The watchword of "efficiency," then, "in a way that appeals to a superficial populace with quantitative standards, emphasizes results rather than ideals, vigor rather than cultivation, temporary success rather than wholeness of life, the greatness of him that 'taketh a city' rather than of him 'who ruleth his spirit.'" Instead of a "reliance on technique, machinery and capital" taking the place of divine power and inspiration, Dr. Foster would test the minister's success by his sincerity and his sobriety of judgment in our age of doubt; because the formation of personality "is at once the primary need of man and the main concern of education."

In more popular vein is an article entitled "Success in the Ministry" which appeared in the *Independent* for September 2, 1907. The editors had asked a minister whom they considered conspicuously

successful to write it. He had finished college and theological school and was ordained at the age of twenty-four. At thirty-five he was pastor of a city church of 1,000 members conspicuous for wealth, culture and refinement, who gave him a salary of $5,000, and he received $2,000 more a year for lectures and articles and in fees and gifts. This minister says that any man who succeeds in the ministry could succeed out of it, and quotes Phillips Brooks: "No man ever ought to preach if he can help it." (This writer could not help it.) He gives six reasons for his "lack of failure":

(1) A legacy from his father of capacity for industry. The one reason above all others for failure is lack of this requisite—"a loathsome thing, for it is laziness. Search here before you look elsewhere for failure."

(2) From his mother a legacy of gentleness. It is the one thing needed to be a gentleman. "After I went to New York it took me six weeks to learn to wear my clothes and six more to learn a language of which the vocabulary is but small. . . ." "One must scorn to the death all counterfeit and sham. Doing this one will be happy and also one will be of use."

(3) From a varied and hard experience in business, a drill in doing "the one hard thing that belongs to that job" — to "give it the best energy and not make a substitute for it of trifling details."

(4) From varied mingling with men, a persuasion of their earnestness and intelligence which made his task "not to keep from preaching over their heads but to keep from preaching under their feet."

(5) An inborn drop of melancholy and

(6) An inborn sense of humor. "The combination is a blessed one" for "to dare to stand between God and men, one must be either impertinent or inspired" and the melancholy gives a sense of the seriousness of life and its situations. The sense of humor moreover is a combination of discrimination, finesse, caution and toleration. In both business and personal relations, one must know the relative importance of matters; "if his instinct does not prompt him, he will never learn, and if he does not learn he will die young."

Turning from these standards and tests suggested by prominent members of the profession, the investigator endeavored to find out what in the mind of the ordinary member of the congregation constituted a successful minister. This was best expressed by a woman who was a faithful and intelligent worker in a large church in a medium sized city, who spoke not only for herself but for others by

summing up the comments of church officers, the young people, and the women's organizations.

He must have (1) *executive ability*, "which includes complete planning, reliable execution and working through others." (2) A social attitude of *personal interest* shown by being cordial to all, by individualizing this interest, and by visiting among the people (among the parishioners this was the activity most heard about). (3) His *pulpit equipment* should include "a logical, rememberable structure," earnestness and force in delivery, facility in words, story-telling ability, and a well modulated voice—"not dropping his voice so the most important things are lost." (4) *Sermon content* is judged by the evident thoroughness of his biblical knowledge, the emotional warmth of conviction (especially of the reality of God), the sincerity of his own character and the experience back of his ideas ("Practicing what he preaches") and the practicality of the sermon application which should be encouraging and "not scolding or dictatorial." (5) He is expected to take *leadership in activity*, promoting good fellowship among the members ("a good mixer"), "appreciating the work done by the church members," and initiating "*sufficient* Christian activity to fill the lives of his people." (6) As to personal characteristics, good looks ("this matters only at first"), good manners and courtesy, good cheer and optimism are desired—and good clothes! ("We like our minister well dressed, that is, his clothes suitable to the occasion, well kept and neat.")

The available material is patently fragmentary, vague, and unformulated. Yet from the reading of the many articles of which the above quotations are only the most telling, and from many conversations with interested leaders in the profession, there seemed to be certain real standards which may be thus formulated:

(1) By common consent the *purpose* of the Christian ministry includes at least the effort to formulate and maintain ideals of conduct and belief, and the effort to organize social groups and institutions which will enable men and women to practice these ideals in daily life.

(2) The *activities* of the Christian ministry include notably:

(*a*) The public presentation of these ideals in *sermons*.

(*b*) Visiting individuals and families of the church community to develop their allegiance to the ideals, and their activity in the special conduct of the Christian faith; these varied duties being familiarly summed up in the term *pastoral care*.

(*c*) The raising of money for various benevolent and missionary enterprises, its expenditure, and the stimulation and direction of the voluntary services of the church community in the accomplishment of coöperative enterprises. These duties require *executive ability*.

(*d*) All those means of arousing the interest of the indifferent and careless, overcoming the opposition of the antagonistic, and otherwise transforming the unlike-minded into members of the like-minded Christian group, which are comprehensively known as *evangelism*.

(3) While the relative proportion of those having their *ministerial training* in academic and professional schools to those who secure it empirically in the work of the pastorate itself varies in different denominations, there is nevertheless a widely accepted standard of desirable preparation, namely, graduation from college and from a theological school.

It seemed, then, that inquiry regarding the problems suggested by the subject under consideration might profitably be conducted from two distinct angles:

(1) The study of the achievements of a body of men engaged in the actual work of the Christian ministry; of the relation of their individual differences in the four factors named above; and of the relation of the amount of their professional training to those achievements;

(2) A study of the characteristics of a body of men taking professional training for the work of the Christian ministry, as revealed by their natural interests and abilities, by their judgments on the training received, and by their instructors' rating of their capacity to receive that training. For these studies, the ministry of the Methodist Episcopal Church was chosen because more complete, intimate, and detailed information is available in print than for any other body of ministers.

PART I

A STUDY OF MEMBERS OF THE NEW YORK AND NEW YORK EAST CONFERENCES

These two conferences together include in their bounds the whole of greater New York, and the type of parishes ranges from the largest metropolitan churches, through suburban, residence districts and small industrial towns, to rural circuits. From the printed Annual Minutes of these conferences, and from ministers in their membership, has been gathered the material for the first part of this study.

1. Judgments of Fellow-Ministers

The list of ministers receiving appointments at the April, 1916, sessions of these two conferences was the starting point of this inquiry. The entire 487 names were arranged alphabetically with four blank spaces following each name, in columns numbered to correspond with the traits described on the instruction sheets. From the names on this list were chosen certain men on the basis of their opportunity for wide acquaintance with the work and personality of their brother ministers, such as active and former district superintendents, executive officers of denominational organizations, pastors long connected with the conference, prominent conference committee workers. To fifty-one such men were sent each a mimeographed copy of the alphabetical lists, a personal letter of request and explanation, and a copy of the direction sheet herewith reproduced.

In the appended list are the names of all the active ministers in the New York and New York East Conferences.

There are four columns following the names, numbered to correspond to the following traits:

1. By Sermon Ability is meant the general sum of the vitality and value of the matter preached about, its style and structure, and the eloquence and force of its delivery, including voice modulation and pulpit manner.

2. By Pastoral Ability is meant the work of visiting, befriending, comforting, "bracing up" and inspiring individuals and families, of the church constituency and strangers; and stimulating, promoting and organizing good fellowship, coöperativeness, and spiritual activity in the church constituency.

3. By EXECUTIVE ABILITY is meant ability to see what details are necessary to make a project successful, to adapt them to changing conditions, to see that they are carried out, and to work through others.

4. By EVANGELISTIC ABILITY is meant the power to induce individuals who have been indifferent or hostile, to adopt Christian faith and conduct, habits and ideals.

You are asked to grade each man whom you know, or know about, well enough to have any opinion about, in each of these traits, using the numbers 1 to 5.

Let 3 stand for the average of good ability in the given trait (*i. e.*, perhaps half the marks will be 3). 2 will mean a very high order of ability, and 1 an exceptional ability. For a grade of ability less than the average in that trait, use 4; and for a trait in which a man has poor ability, use 5.

Do not let your mark in one column influence your judgment of the same man in another column. Judge each man in each trait by itself. Work as rapidly as you can without feeling hurried; it is your "snap judgment" that is wanted.

Of course all papers are strictly confidential.

The rather brief time-limit set considerably reduced the number of replies, as belated and apologetic letters proved. The attitude was in general one of cordial and interested coöperation. Some felt that the task would require an unworthy attitude of criticism, an impossible "sitting in judgment on their brethren," and others felt that their own work precluded the possibility of having first-hand knowledge of others' preaching. Several, however, testified that they found the classification of traits, and the division of degrees, quite natural and easy to follow. Those who were interviewed personally were observed to score the judgments with ease and rapidity. In all, sets of usable returns were received from 28 judges, who had classified into the five places of the scale the four[1] traits of from 24 to 382 of their fellow ministers whom they "knew well enough to have an opinion about." Four hundred and seventy (470) of the 487 names on the total list received estimates from two or more judges.

The first effort in the treatment of this material was to ascertain the reliability of these personal judgments as estimates of any man's ranking in the individual traits. It was therefore tabulated in the following manner:

[1] If one or more traits were omitted from the judgment of any individual the remaining ratings of that individual by that judge were thrown out; only complete judgments were used.

Minister	*Judge 1*				*Judge 2*				*Judge 3*				*Judge 4*				*(etc. to 28)*			
	Serm.	*Past.*	*Exec.*	*Evang.*	*Serm.*	*Past.*	*Exec.*	*Evang.*	*Serm.*	*Past.*	*Exec.*	*Evang.*	*Serm.*	*Past.*	*Exec.*	*Evang.*	*Serm.*	*Past.*	*Exec.*	*Evang.*
1	3	2	3	3					2	2	2	2	2	3	3	4	1	2	2	2
2									3	3	3	3	3	2	4	3				
3					3	3	3	3	3	4	4	3								
4	1	2	2	4	1	2	3	3	2	1	3	4					1	1	2	3
(etc. to 470)																				

The individual ministers were then classified, according to the number of judges rating them, into six classes, as follows:

Class I,	19	men,	rated	by	from	20	to	23	judges.
Class II,	28	men,	rated	by	from	16	to	19	judges.
Class III,	65	men,	rated	by	from	12	to	15	judges.
Class IV,	119	men,	rated	by	from	8	to	11	judges.
Class V,	126	men,	rated	by	from	4	to	7	judges.
Class VI,	113	men,	rated	by	from	2	to	3	judges.

For testing the reliability of the judgments the method of "random halves" was used. For each individual in Class I, the first 10, 11, or 12 consecutive judgments were averaged for each trait separately, and the averages recorded in columns 1*a*, 2*a*, 3*a*, 4*a*. The remaining ten or eleven judgments for these individuals were averaged and recorded in columns 1*b*, 2*b*, 3*b*, and 4*b*. No attempt was made to have the judgments of the same judges recorded invariably in the same column, *a* or *b*. For the individuals in Class II, the averages of the first 8, 9, or 10 judges formed the four *a* columns, and the remaining 8 or 9 judgments became the *b* columns. And so on with each class.

For finding the median from which individual deviations were to be reckoned, a distribution table for the entire six classes together was made of the four traits in the two halves. "By hypothesis," if the judgments were sufficient in number for perfect accuracy, and if directions were faithfully followed, the median should in every case have been 3. The actual result was:

1 a	*1 b*	*2 a*	*2 b*	*3 a*	*3 b*	*4 a*	*4 b*
3.0	3.0	2.6	2.8	2.8	3.0	3.0	3.0

In each column, however, the mode was 3 and the median of all the separate judgments was 3. The fraction of deviation was so small that the "perfect" median 3 was actually the most accurate

basis of comparison for all traits, columns and classes. Proceeding from this median 3, deviations of the scores of each individual by random halves of the judgments were recorded for the six classes separately. The reliability of these personal judgments of the ranking of the men in the four given traits, reckoned by the Pearson coefficient of correlation between the random halves, is shown in Table I.

TABLE I

RELIABILITY OF JUDGMENTS OF MINISTERS ON THEIR ASSOCIATES

Class	*No. Men Rated*	*No. Judges*	*Trait 1 (Sermon)*	*Trait 2 (Pastoral)*	*Trait 3 (Exec.)*	*Trait 4 (Evangel.)*
I	19	20–23	.975	.911	.9401	.9523
II	28	16–19	.865	.748	.897	.679
III	65	12–15	.772	.757	.653	.505
IV	119	8–11	.706	.522	.7206	.629
V	126	4– 7	.467	.325	.511	.378
VI	113	2– 3	.2508	.111	.211	.158

This shows that if 20 or 30 of his associates rate a minister on his ability to preach, to exercise pastoral care, to carry on the business of church organizations, and to influence the life and attitude of adults outside the church membership, the composite estimate will, in the case of each of the four traits, approximate the judgment of all of his associates closely enough to be considered a true rating. The low correlation of Class VI is especially significant in view of the common practice of accepting the recommendation of a committee of two or three regarding a man's fitness for a position. Professor Hollingworth's experiments show that in the case of desirable traits, the possession of those traits by a person makes him a more accurate judge of them in other individuals. All of the judges in the present study were, in the judgment of their fellows, possessed of these four traits in high degree. Yet in the case of the individuals judged by only two or three of them the correlation of their judgments ranged from +.11 to +.25.

Pulpit and candidate committees are usually composed of a somewhat larger number, say from five to seven, that is, of a number comparable to Class V, the reliability of whose judgments runs from +.32 to +.51. It is therefore evident that in order to obtain a true rating of an individual's ability in such traits as these, it

is desirable and usually necessary to secure the composite judgments of at least a score of individuals.

The low correlation of Classes V and VI is due not merely to the fewness of the number of judges but also to the fact that these men were less well known. If only two or three men know an individual well enough to venture an opinion about him, the chances are that their knowledge of him is actually less complete and certain. In the case of the better known men each judge's estimate is probably based on more adequate data and so is more reliable. For this reason the estimate of any two or three or half dozen of the 20 who judged the men in Class I would probably show a closer correlation in regard to those men than that of the like number in Class V and Class VI. Hence the rapid drop in correlation coefficients is only what might have been expected. On the other hand, there may be for certain specially prominent individuals a tradition which exerts a certain unconscious pressure on the rating given by the judges. In order to have a sufficient number of men for the purposes of this study it is necessary to include men from at least the first five classes, and in some instances from all six.

Even when the self-correlation of two measures or estimates of the same fact is not high, if we know what those self-correlations are for each set of facts, we can compute what the intercorrelations of those facts are by the well-known formula of Spearman. (See Note 1.) Consequently these judgments concerning the individual men and their ranking in the various traits make it possible to answer further questions. Thus, Does the possession of any one trait in high or low degree bear but a chance relation to the other traits, or are certain of the traits linked together, with chance relations to the rest? Are ministers in general single-talent men? That is, for example, does the possession of exceptional pulpit ability imply a compensating lack in executive or pastoral ability?

Table II affords an interesting answer to these and numerous similar questions. Pairing each trait with each of the others, separately for each of the six number-of-judgment classes, and making the computation for the halves separately in each of these six pairs of traits,—column *a* with column *b* and *b* with *a* of each pair,—and then correcting for attenuation (see Note 1), the following relationships are seen. (In view of the considerations just stated, the arithmetical average of all the classes is probably nearest the true correlation in each case.)

TABLE II

INTERCORRELATION OF TRAITS FOR 470 METHODIST MINISTERS

Class	*1 and 2* [2]	*1 and 3* [2]	*1 and 4* [2]	*2 and 3* [2]	*2 and 4* [2]	*3 and 4* [2]
I	.890	.857	.704	.751	.851	.427
II	.506	.699	.072	.672	.643	.360
III	.473	.799	.189	.587	.723	.331
IV	.286	.718	.445	.469	.757	.517
V	.330	.653	.438	.589	1.060	.856
VI	.497	.908	.683	.333	1.015	.586
Average	.50 ± .054 [3]	.77 ± .025 [3]	.42 ± .06 [3]	.57 ± .034 [3]	.84 ± .04 [3]	.52 ± .047 [3]

[2] Trait 1 is Sermon ability.
Trait 2 is Pastoral ability.
Trait 3 is Executive ability.
Trait 4 is Evangelistic ability.
[3] Probable Error.

1. Note that the correlation of each trait with each of the others is positive. That is, in no case does the possession of marked

NOTE 1. For those who wish to follow or verify the details of the work, the raw correlations are as follows:

Class	1a–2b	1b–2a	1a–3b	1b–3a	1a–4b	1b–4a	2a–3b	2b–3a	2a–4b	2b–4a	3a–4b	3b–4a
I	.834	.846	.823	.820	.641	.711	.660	.731	.749	.840	.415	.490
II	.305	.542	.593	.640	−.013	.125	.529	.573	.359	.585	.175	.446
III	.312	.421	.379	.582	−.019	.261	.323	.546	.366	.545	.293	.123
IV	.244	.124	.514	.511	.336	.263	.255	.325	.431	.437	.349	.349
V	.137	.121	.338	.302	.265	.128	.270	.213	.376	.367	.413	.343
VI	.179	.039	.182	.239	.071	.265	.011	.258	.047	.381	−.013	.229

It must be remembered that these "raw" figures as they stand are as misleading as it would be to take, say, the arithmetical average of the amount of work a man did on two different days selected at random and call it his average daily accomplishment. It might be, but one day might be a national holiday and the other one on which he was coming down with typhoid fever; or both might be days on which he was working under special pressure and over time. These correlations are part of the "work" necessary to find the "answer." The two columns represent two independent measures of the series of facts measured. It is thus possible to make four correlations between the two pairs of measures of each two series of the measures to be correlated. By the use of the Spearman formula,

$$r_{pq} = \frac{\sqrt{(r_{p_1q_2})\ (r_{p_2q_1})}}{\sqrt{(r_{p_1p_2})\ (r_{q_1q_2})}}$$

the attenuation due to chance inaccuracies in the two series of measures (for example Trait 1, columns *a* and *b*, and Trait 2, columns *a* and *b*) is corrected, and the real correlation between Traits 1 and 2 is found to be that in Table II.

ability in one trait imply a probable compensation of poor ability in any other.

2. The high ability correlations occur between sermon and executive and between pastoral and evangelistic abilities.

3. The abilities which are least closely linked are sermon and pastoral, sermon and evangelistic, and executive and evangelistic. Yet even here the correspondence is in general much closer than that between a man's grades in theological seminary and any of these four abilities. (See correlations on page 67.) The lowest of the correlations, that between sermon and evangelistic abilities, is exactly the same as that between sermon ability and ability to increase church membership (+.42), and more than that between sermon ability and achievement in increasing contributions to benevolences or increasing one's own salary, respectively +.22 and +.20. (See Table VII, page 37.)

4. In Classes II and III the correlation is startlingly lower between Traits 1 and 4 (Sermon and Evangelistic abilities) than between the others. Note that in Table 1 the reliability of the judgments in Trait 4 (Evangelistic ability) is less than that of the other judgments in these classes.

One contributing cause of this variation is known to the investigator. The term "Evangelistic ability" was observed to have two sharply distinct connotations in the minds of different judges. In some cases, at least, the carefully worded definition in the direction sheet was practically nullified by the habitual mind-set. Those with the well-defined concept of a generation ago, of a certain dogmatic content and revivalistic method, distinctly "marked down" in Trait 4 some individuals in Classes II and III whom they felt to be "dangerously intellectualistic" or "modern." In more than one case, on the other hand, judges remarked that they had "probably marked certain men quite differently from the general consensus of opinion" (regarding Trait 4) because they did "not believe revivalism was evangelism."

Thus in Classes V and VI, correlations with Evangelistic ability go from .438 to 1.06.[4] A glance through the columns of the "raw" correlations (given in Note 1) shows that there, too, wherever Trait 4 occurs there is an upset in the even tenor of the figures;

[4] This "more than perfect" correlation simply means as wide a variation on one side of a ratio that might be expected as on the other. From .86 to .66 would not be unusual; from .86 to 1.06 means no greater variation.

more or less, perhaps, as the two schools of judges fall more or fewer into the same column by the random division into halves.

5. Hence, with individual variations in the different traits falling, in the summarized judgments in all classes, between an extreme (for each individual) of two of the five points in the scale, an "exceptionally good" minister is from four to eight times as often apt to be "exceptionally good" in *all* of the component traits as he is to show an outstanding deficiency in some one of them. The inefficient executive is apt to be also a poor sermonizer or pastor. In general the mediocre man is a sum of mediocrities rather than a balance between brilliance in one ability and defect in another.

It is evident, then, that these four qualities are definite factors in the work of the Christian ministry; that they are measurable by the method of judgment by associates; that these measures have a high degree of reliability; and that the four qualities are themselves closely linked.

The question at once arises, What is the correspondence between the degree in which an individual possesses these traits and the degree of public recognition of his work? One rough estimate of this recognition is at hand, namely, salary received. (For a discussion of the validity of this measure of "success," see Part II, pp. 42–43.) We therefore proceed at once to study the relationship between these four traits in these ministers and the salaries paid them by the churches in these two conferences.

2. A Study of the Relation of Salary to Ability

In order to insure reliability in conclusions from any set of facts it is necessary to have two sets of measures of those facts. The two measures of salaries received by the men in this study are the records in the *Annual Minutes of the New York and New York East Conferences*, printed in 1917 and 1920, of the salaries paid in the preceding fiscal years.

In the judgments by their associates 470 men of these two conferences had received ratings. Omitting Class VI leaves 367 who had been estimated by four or more judges. Of these 367 men, all of whom received appointments in one of the two conferences in the spring of 1916, by the time of the 1920 Conference session some had died, several had retired or withdrawn, others were supernumerary, and many were in positions in the church other than

the pastorate so that the salary they received was not reported. However, 212 of the 367 men in the first five number-of-judgment classes were in the pastorate or district superintendency both in 1916–17 and in 1919–20, and the amount of their salary for both years was a matter of printed record.

A distribution table of the 212 salaries was made out for each of the two years, showing that the median salary *of these men* was $1800 in 1917, and in 1920 was $2100. The deviations of the individual salaries in the two years from the respective medians were taken as the two measures of the salary fact, and correlated with the *a* and *b* columns of the deviations of the rating of these 212 individuals from the median 3 in each of the four traits. The scattergram method of recording the paired measures was used, and the correlation coefficient was obtained by the method of unlike signs. (For these "raw" results, see Note 2.)

Time may be expected to be a factor to be reckoned with in the matter of salary. In the early part of an individual's ministry time brings "experience," and presumably improvement in ability and in salary. In the last part of a long ministry the elapsing years mean "age" and probably decreasing salaries. Also in this particular three-year period the rising cost of living had somewhat affected even ministerial salaries. Hence the correlation of salary '17 with salary '20 was first figured. If a uniform percentage had been added to each salary the correlation would have been 1.00. It actually

Note 2. For those who are interested in following the work, the raw correlations are as follows:

Salary '17 with I *a*	+ .76	Salary '20 with I *b*	+ .66
Salary '17 with II *a*	+ .48	Salary '20 with II *b*	+ .40
Salary '17 with III *a*	+ .75	Salary '20 with III *b*	+ .63
Salary '17 with IV *a*	+ .75	Salary '20 with IV *b*	+ .40
Date of Entrance with I *a*	+ .15	with I *b*	+ .06
Date of Entrance with II *a*	− .09	with II *b*	− .09
Date of Entrance with III *a*	+ .13	with III *b*	− .04
Date of Entrance with IV *a*	+ .03	with IV *b*	+ .03
Date of Entrance with Salary '17	+ .35	with Salary '20	+ .03

The self-correlations are:

Sermon ability	(I *a*, I *b*)	+ .67
Pastoral ability	(III *a*, II *b*)	+ .59
Executive ability	(III *a*, III *b*)	+ .61
Evangelistic ability	(IV *a*, IV *b*)	+ .53
Salary	(1917, 1920)	+ .89

The high self-correlations and the high raw correlations of the traits with salary are immediate indications of the reliability of both measures.

was +.89, showing the effect of certain charges which in spite of the trend had not increased their salary apportionment, and of the varying increases in others.

Yet three years would hardly be expected to have a very great effect on any individual's salary except in the case of those who during that period reached the peak of opportunity and promotion or of those who in that time began the descent toward retirement. To find the actual effect of this factor on this group of 212 ministers the salary figures for 1917 and for 1920 were correlated separately with the date of entrance so that correction for attenuation might be made. The result is the low figure of +.11.

In order to take account of the factor of length of time in the ministry as it might affect individual abilities, the cross-correlations were computed between each man's date of entrance into the ministry and the two measures of his ability in each of the four traits. (Of these 212 men 106 had begun their work in 1896 or earlier, and 106 in 1897 or since. So their deviations by two-year periods from the median '96–'97 were used in correlating with both the *a* and *b* columns of Traits I, II, III, and IV. See Note 2 for the figures of these "raw" correlations.)

Working out the self-correlations between all the various measures of these men and using them to correct the cross-correlations by the Spearman formula, we have the relationship shown in Table III.

TABLE III

Relation of Salary and Date of Entrance to Each of Four Ministerial Abilities

Salary with Sermon Ability	$r = +.916$
Salary with Pastoral Ability	$r = +.603$
Salary with Executive Ability	$r = +.931$
Salary with Evangelistic Ability	$r = +.80$
Date of Entrance with Sermon Ability	$r = +.03$
Date of Entrance with Pastoral Ability	$r = -.118$
Date of Entrance with Executive Ability	$r = +.07$
Date of Entrance with Evangelistic Ability	$r = +.04$

The reliability of the figures as measures (as shown by the self-correlations) is so high that we may safely accept certain conclusions which stand out clearly from this table.

1. Congregations pay salaries in proportion first of all to that general ability to "make things go" known as executive ability;

next, and almost as much, for good sermons; while faithful personal care of the poor, the sick, the troubled and the bereaved does not secure salary recognition even comparable with that given to the warmth and fervor of evangelistic ability.

2. Without a separate and complicated study it is not possible to interpret certainly the low correlations of date of entrance with abilities. Such an effect could be produced by a sharp contrast between the degree of these abilities in earliest and latest professional years and in the middle portion. It could also be an indication that these abilities were determined by original capacity and little influenced by experience. A possible interpretation of the negative relation of length of ministry and pastoral excellence is that the zeal, the good cheer, and (perhaps most of all) the physical vigor of youth more than offset the experience of age.

Small as are the separate correlations of the length of time in the ministry with salary and with the four traits, it is nevertheless worth while to eliminate as far as possible the time effect from the relationship of these abilities to success as grossly measured by salary. This is done by what is known as "partial correlation," a method for removing the effect of a third irrelevant variable to which the two series to be compared both correspond to any appreciable degree. Using the formula

$$r_{pq} = \frac{r_{pq'} - (r_{p^v})\ (r_{qv})}{\sqrt{(1 - r_{pv^2})\ (1 - r_{qv^2})}}$$

to remove any illegitimate influence of the date-of-entrance variable on the apparent relations of salary and ability (Table III) we have as the relation of salary and ability in the case of these 212 men, *if they had all been in the ministry the same length of time*, the figures shown in Table IV.

TABLE IV

Relation of Salary to Ability (Factor of Time Element Removed)

Salary with Sermon Ability	$r = +.919$
Salary with Pastoral Ability	$r = +.624$
Salary with Executive Ability	$r = +.9316$
Salary with Evangelistic Ability	$r = +.801$

It would have been possible to compute this effect even more closely by taking the group of very old and very young ministers and of those in the long stretch of maximum-efficiency years separ-

ately, and computing all the cross-correlations and corrections for each group. But as Table IV differs from Table III by only from .0006 to .003 (except in the case of pastoral ability, where the correlation with salary is increased by .019) the labor was not undertaken.

The conclusions from Table III are only strengthened by the corrections of Table IV. The various factors of ministerial success are qualities closely linked, but together exhibiting wide individual differences. These differences remain practically constant during at least the central period of active ministry. The degree in which a man is judged by a sufficient number of competent associates to possess these desirable traits is a fairly close measure of the scope he will find for exercising them and of the public recognition of his success, as indicated by the salaries paid by the churches to which he is appointed.

3. A Study of Conference Statistical Records

Turning from the measure of traits by the summation of personal judgments to the objective record of the work of these same men in their pastorates, what data are available for such objective determination?

It is certain that there is much in the necessary work of every minister that cannot be put into statistics. Some of the most valuable results are never recorded, and the efforts which produce them have no objective measure. Even the recorded facts, such as additions to church membership, may have greatly varying weight on a scale of ultimate spiritual values. Increase in membership in one pastorate may mean faithful seeking of newcomers during an influx of industrial population and securing the transfer of church letters of adults. In another pastorate it may mean inspiring a group of active boys and girls to give a lifetime of service to the church. In a third community it may mean an evangelistic campaign for the reclamation of hardened sinners. Is the erection of a fine church edifice to be "credited" to the minister who builds it or to the one who prepares for it? Yet the only quantitative way to compare the achievements of a minister in different years, or the achievements of different ministers, is by the numbers of members or pupils or dollars or pastoral calls recorded.

Every pastor in the Methodist Episcopal Church makes every year at his Annual Conference a detailed report of his "charge."

These reports are on blanks uniform throughout the denomination. The minutes of each annual conference print the figures from these reports in a tabular form, uniform for all the conferences, and these statistical tables are collected and also printed annually in the two volumes (Fall and Spring Conferences respectively) of the General Minutes of the denomination.

The headings of these statistical tables are:

Ministerial Support: Total amount paid pastor, including house rent. Rental value of parsonage. Deficiency. District superintendent, paid. Bishops claim, paid. Conference claimants' claim, paid. Total paid for ministerial support.

Sunday Schools: Number officers and teachers. Total enrollment in all departments.

Baptisms: Adults baptized. Children baptized. Baptized children who are under instruction as probationers.

Church Membership: Probationers: enrolled during year, now on roll. Full members on roll, non-resident. Local preachers. Deaths during year.

Epworth League: Senior members. Junior members.

Church Property: Number of churches, estimated value. Number of parsonages, estimated value. Paid for building and improvement on churches and parsonages. Paid on old indebtedness on churches and parsonages. Present indebtedness on churches and parsonages. Current expenses, sexton, fuel, light, etc.

General Conference Expenses. Conference Entertainment Receipts.

Missions: Board of Foreign Missions (church, special gifts, Sunday schools). Board of Home Missions and Church Extension (church, special gifts, Sunday schools).

General Benevolences: Freedmen's Aid. Board of Education. Board of S. S. Conference claimants. Temperance. Bible Society. Epworth League. Brotherhood. Woman's Foreign Missionary Society. Woman's Home Missionary Society.

Other Benevolences and Miscellaneous.

Of this amount of statistical material collected, tabulated and printed at such great expense of time, labor and money, much is obviously part of the mechanism for running a great connectional business, for ensuring accuracy and attention in so great and heterogeneous a mass of working units. Does it contain any facts which might be significant measures of abilities and progress in the individual pastors? By what method could such facts be detached from the impersonal files of "conferences," "districts" and "appointments" and so arranged as to show the achievements of the itinerant pastors?

There could, of course, be no attempt to get back of the figures as given. It must be assumed that the numbers in the table were the actual number of members of each church at the transition from one

conference year to another and not sometimes an approximation. Ministers whose salary was reported as $750 must be assumed to have received $750, without speculation as to whether for one man $150 of it was only "promised" when he went to conference or whether wedding fees might have added $50 to the actual income of another.

For purposes of experiment the following procedure was carried out in the present study.

A. Among the tabular headings the following were chosen for attention, with the indicated questions in view:

Pastor's Salary ("including house rent"). Does increase of a man's salary over his own salary of the previous year indicate either time-progress or increasing worth? Does increase over his predecessor's salary indicate relative-value judgments by the congregations?

Church Membership (total of probationers and full members "now on roll"). Does the net annual increase or decrease of membership in a given church show anything significant regarding the pastor's special abilities? If one man habitually adds to the net membership of whatever church he is serving while another in general just about or not quite succeeds in keeping up with losses through death or removal, is there any ascertainable relation between these facts and the sermon, pastoral, executive or evangelistic abilities of the two men?

Sunday School Membership ("total, all departments".) Can there be traced a relation between the incumbency of certain pastors and the fluctuations in the growth of the Sunday School? If so, in relation to what ministerial trait?

Property Valuation. Is the tradition that certain men are (material) "builders" sustained by a record of new churches or parsonages or additions thereto in the charges these men have served? What special ability is indicated?

Money Payment on Property. Are there some men who neglect the insurance and repairs and others who always attend to them? Is there here any criterion of "executive ability"?

Debts, Incurred or Paid Off. May this be a contributing item, throwing light on the same question of "executive" traits?

Missions (Home and Foreign Boards). Is the amount paid to the great national and world-wide interests of the church a co-variant with the pastorate of a church? If so, what does zeal in this interest indicate?

Benevolences (including all other local and general interests except the Epworth League, Methodist Brotherhood, and various expense accounts which vary with the proximity of conventions, and the like; and including here rather than in "Missions" the Women's Missionary Societies, home and foreign, because these are autonomous and more dependent on local than pastoral leadership). Does this amount indicate anything, or anything other than what may be deduced from the data on Missions?

B. To determine whether there is any significance, these figures must first be traced out for a series of individuals. Twenty-five was the minimum chosen for the preliminary testing out, and fifteen years seemed a reasonable length of time for the successive annual figures to show individual trends. Copies of the *Annual Minutes of the New York and New York East Conferences* were obtained for the fifteen years prior to and including 1916 (from which Minutes the list had been made out for the judgments on the separate ministerial traits). The 1916 Minutes give for each pastor then appointed his previous record of appointments, within and without his present conference. From these were first eliminated those who had not been in the pastorate within the bounds of these two conferences for the entire period of fifteen years. From the remainder were chosen twenty-five men, divided as evenly as possible between the two conferences and between the six classes in respect to the number of judgments made upon them by their fellow ministers.

Referring to Table I for comparative numbers, by using as nearly as possible 5 per cent, this series was allotted as follows:

Class	*I*	*II*	*III*	*IV*	*V*	*VI*
Number of judgments	20–23	16–19	12–15	8–11	4–7	2–3
Number of individuals	19	28	65	119	126	113
Number for tabulation	2	2	4	6	6	5

C. The first task in this experiment must be to determine the reliability of the figures as measures. Therefore, under each of the chosen headings, all figures were arranged in two columns by the eight even and seven odd calendar years. To get the figures for each individual minister, a table was made of all the charges each had served, by years, and the selected statistics were copied for these charges for every year in which any one of the twenty-five men was there, and for the year preceding such pastorate when any other than one of the twenty-five was the preceding incumbent. This informa-

tion was assembled according to the following scheme, for each of the ninety-nine churches served by the twenty-five men in the fifteen years.

	Pastor	*Salary*	*Members*	*S. S.*	*Church Value*	*Other Headings*	*Missions*	*Benev-olences*
1901		$2,400	205	168	$75,000		$150	$86
1902	A. B.	2,400	168	168	75,000		75	113
1903	not 25							
1904	not 25							
1905	not 25							
1906	not 25							
1907	not 25							
1908	not 25							
1909	not 25							
1910	not 25	2,500	267	255	210,000		100	70
1911	C. D.	2,000	341	288	225,000		160	244
1912	not 25	2,000	277	331	225,000		124	110
1913	E. F.	2,000	225	326	94,000		202	191
1914	E. F.	2,000	209	342	94,000		176	287
1915	E. F.	2,500	219	282	94,000		172	345
1916	G. H.	2,000	268	335	95,000		157	266

FIG. 1. FORM FOR 15 YEARS' FISCAL RECORD OF EACH OF 99 CHARGES

From these charts of the churches served were then prepared charts for each of the twenty-five individual pastors; that for Individual No. 8 being given here as a sample.

EXPLANATION OF COLUMNS IN FIG. 2

Salary: Owing to the relative fixity of salaries on a given charge, and to the group or "grade" system of rotation when ministers are moved (explained in detail in Part II, p. 42) the significant thing under this item is not the *amount* of difference, but the *fact* of an actual increase or decrease of the man's salary as compared with his own in the preceding year, and with his predecessor's in a year when he was moved to a new appointment. Hence increase (plus); decrease (minus); and no change (equals) were the only records made.

Members (Church and Sunday School): The figures refer in each case to the numerical increase or decrease of any given year over the directly preceding year *in that church.* For example: Rev. Mr. 8 in 1902, the first year of the record, is preaching at A. The church membership is 269. The 1901 Minutes show that in that (preceding) year the membership was 215. So in the even year column the first entry is +54. At the close of that conference year Mr. 8 is moved to B., and his report from B. in the 1903 Minutes shows a membership of 674. But the 1902 membership at B. was 651. So in the first space in the odd-year column is entered +78. He remains at B., and in 1904 the membership is 697, which compared with the 1903 membership of 671 makes the second even-year entry +23; and so on.

Year	Church	Salary Own a	Salary Own b	Salary Predeces. a	Salary Predeces. b	Church Members a	Church Members b	S. S. Members a	S. S. Members b	Property Value a	Property Value b	Money Improv. a	Money Improv. b	Debts a	Debts b	Mission Boards a	Mission Boards b	All Other Benevolences a	All Other Benevolences b
'02	A	+		+		+ 54		− 53		=		+		=0		− 11		+129	
'03	B		+		−		+ 78		+ 40		+		+		+		+ 28		+ 228
'04	B	=				+ 23		+ 8		=		+		+		− 56		−359	
'05	B		=				+ 57		− 43		=		+		+		=		+ 60
'06	C	+		−		+166		+121		=		+		=0		+100		+ 41	
'07	C		+				+ 56		− 19		+		+		=0		+ 25		+ 158
'08	C	+				+ 23		+ 71		=		+		=0		− 31		+ 59	
'09	C		=				− 37		+ 29		=		+		=0		+ 39		+ 171
'10	D	−		=		+ 32		+ 81		=		+		+		+ 25		+ 24	
'11	E		+		=		+169		+ 78		=		+		=0		+1064		+ 275
'12	E	=				+ 39		+ 5		=		+		=0		−488		+152	
'13	E		=				+ 3		+ 90		=		+		=0		− 299		+1679
'14	F	−		+		+ 70		+124		=		+		+		− 60		− 19	
'15	F		=				+ 27		+ 45		=		+		=0		− 78		+ 168
'16	G	−		=		− 35		+ 66		=		+		=0		− 37		−120	
Total	Signs	0	+3	+1	−1	+ 7	+ 5	+ 6	+ 3	0	+2	+8	+7	+3	+2	− 4	+ 2	+ 2	+ 7
Total	Numbers					+372	+347	+423	+220							−558	+ 979	+967	+2739

FIG. 2. FORM FOR 15 YEARS' PASTORAL RECORD OF EACH OF 25 MEN

At C. where he is appointed in 1906, Mr. 8 adds to the original (1905) membership of 652, during the first 3 years, a total of 245 members, recorded by annual increase under the three entry-spaces; but in 1909 the membership drops from 897 to 860, so the entry for 1909 is −37. Thus each individual's work in sustaining the numerical strength of churches under his care is based on a comparison of successive years in the same church, not on the relative size of the churches to which he is sent. The same procedure is followed with the Sunday School figures.

Property. Money paid on Repairs, etc. Debts paid or incurred: Under these three headings are recorded not amounts but the simple fact that no changes were made in the church and parsonage valuation (=), that new buildings or additions increased the valuation (+), or that an old building had been disposed of or valuation reduced to correspond with deterioration of property values (−); that money for repairs, etc., had (+) or had not (−) been spent; and that debts had been contracted (−) or paid (+) in part or in full. (Where there was no indebtedness to pay, the fact is indicated by " = 0.")

Missions and *Benevolences:* Under these, *amounts* of increase or decrease are recorded on the same basis of annual comparison with the same church as was used for membership records.

As a preliminary method, only the algebraic sum of the pluses and minuses in each column in Fig. 2 was used as the measure for each individual. With this material a new table was formed, with the deviations of each individual from the median mark of the group, in each pair of columns, and the Pearson coefficient of correlation was calculated for the reliability of each of these numerical measures of these twenty-five men, with the results shown in Table V.

TABLE V

Reliability of Increase or Decrease Measures by Plus and Minus Signs
(Data from Fig. 2.)

Increase or decrease of own salary	$r = +.09$
Increase or decrease over predecessor's salary	$r = +.198$
Increase or decrease of church memberships	$r = +.42$
Increase or decrease of Sunday School memberships	$r = -.049$
Increase or decrease of property valuation	$r = -.18$
Money paid or not paid on church property	$r = +.69$
Debts incurred, paid, or left *in statu quo*	$r = +.19$
Increase or decrease of amount paid for Missions	$r = -.16$
Increase or decrease of amount paid, other Benevolences	$r = +.057$

Such wide variations without apparent reason might possibly be due to the fact that the plus and minus measure is not fine enough to be reliable. Hence a new series of measures was made out for each of the four activities recorded under the statistical headings of Church members; Sunday School members; Missions:

and Benevolences, and worked through for the twenty-five men.[5]

In the method next followed, the numerical amount of increase or decrease over the preceding year, as recorded in the individual record of Fig. 2, was used as a *percentage*, and the *rate* was calculated on the *base* of the amount recorded in the year preceding the individual's pastorate in a given church. Elements of error could be discerned in any practicable plan of choosing such a base, but this procedure was worked out on the hypothesis that a new pastor in his first year faces a certain situation as regards membership and habits of giving. His own personality and methods supply a new factor which may be supposed to be constant for the time of his pastorate. Hence the base for each year of a given pastorate remains that of the status left by his predecessor, not a new base of the situation as altered by succeeding years of his own efforts.

Concretely: Taking again Individual No. 8 (cf. Fig. 2). The bases will be the number of members or the amounts paid for the year preceding the beginning of the tabulation (1901), and for the years preceding the beginning of each new pastorate, namely, in this case, 1902, 1905, 1909, 1910, 1913, and 1915. Working this out for the single item of church membership, reference to the minutes for the charges indicated here as A, B, C, D, E, F, and G, shows that the memberships at the beginnings of these successive pastorates of No. 8 were as follows:

		Members
A	1901	215
B	1902	651
C	1905	652
D	1909	532
E	1910	572
F	1913	504
G	1915	752

The calculations for No. 8 are shown in Fig. 3.

And so for each of the four measures for each of the twenty-five men, the average obtained by dividing the algebraic sum of the annual percentages of increase or decrease by the eight years in the "even year" and the seven in the "odd year" column was taken as the individual's measure in the trait in question. The result for

[5] For more elaborate computations only part of the measures were chosen for calculation. Those activities which might seem to be most closely connected with the individuality of the pastor rather than with the makeup and habits of the local offical board were the fluctuations in membership of church and Sunday school, and in contributions to interests other than the local church enterprises.

the twenty-five men is shown in Table VI, Parts 1, 2, 3, and 4. In each part of the table, Column A (1) shows the *total numerical* net increase or decrease in members or dollars as the case may be, in the churches under the charge of these twenty-five ministers for the even years, 1902–1916 inclusive (cf. Fig. 2, p. 23). Column

Column A—Even Years				*Column B—Odd Years*			
Year	Base	Incr. or Decr.	Rate %	Year	Base	Incr. or Decr.	Rate %
1902	215 (A)	54	.25	1903	651 (B)	78	.12
1904	651 (B)	23	.035	1905	651 (B)	57	.09
1906	652 (C)	166	.25	1907	652 (C)	56	.085
1908	652 (C)	23	.035	1909	652 (C)	−37	−.058
1910	532 (D)	32	.06	1911	572 (E)	169	.30
1912	572 (D)	39	.06	1913	572 (E)	3	.005
1914	504 (F)	70	.15	1915	504 (F)	27	.05
1916	752 (G)	−35	−.05				
			8) +.79				7) +.59
			+10%				+8%

Fig. 3. Sample of Procedure in Working Out Increase and Decrease Percentages

A (2) gives the *percentage* of *average annual* net increase or decrease for the same ministers and charges for the same period (cf. Fig. 3 above). Column B (1) and (2) gives the same facts for the odd years of the period, 1903–1915.

The figures as they stand are of interest. Taking first the gross totals; the net result of the labor for 15 years each of 25 pastors, so chosen as to be a representative sampling of the Methodist ministers of the two Conferences covering the territory of the largest city in the United States, is 4877, or a little less than 13 members each, per year. But actually the bulk of these were the additions under the pastorates of one fourth of these men, and the detailed records show that these were in those pastorates during which these men were in growing residence sections of the cities included.

For 13 of the 25 men the algebraic or net totals of changes in membership occurring in the churches during their pastorates show an actual loss of 927 during this period. That is, if by some means the membership of the churches could have been preserved intact, without deaths or removals, it would have been larger than it was with all the additions secured by these men under their several pastorates.

TABLE VI. PART 1

NUMERICAL AND PERCENTAGE INCREASE OR DECREASE IN CHURCH MEMBERSHIP, 1902–1916

Individ.	*Column A* (1) Total	(2) Av. % Annual	*Column B* (1) Total	(2) Av. % Annual	(*Numerical Total A and B*)
1	491	.095	164	.037	655
2	1629	.15	620	.07	2249
3	−94	−.06	−197	−.04	−291
4	263	.07	45	−.016	308
5	−182	−.004	182	.04	0
6	54	.01	−133	−.02	−79
7	10	.007	−37	−.03	−27
8	372	.10	347	.08	719
9	−86	−.03	27	.006	−59
10	677	.116	356	.07	1033
11	101	.04	−11	−.05	90
12	−22	−.007	−8	−.006	−30
13	128	.09	69	.12	197
14	−220	−.07	18	.005	−202
15	−3	−.025	−8	−.001	−11
16	53	.025	−21	−.009	32
17	116	.04	9	−.004	125
18	70	.06	−76	−.05	−6
19	−11	−.01	−77	−.02	−88
20	−327	−.04	257	.09	−70
21	−108	−.045	227	.11	119
22	87	.045	−15	−.009	72
23	31	.015	−54	−.03	−23
24	223	.10	−18	−.006	205
25	−25	−.01	−16	−.003	−41
Total	3227	.015 [6]	1650	−.006 [6]	4877

[6] Median, not total. Median of two halves together, .005. The difference being so slight, zero was taken as the central tendency and the correlation was calculated with the figures as they stand.

By the Pearson formula, $r = +.32$.

In the "if" must be sought the reasons not only for the net losses under half of the ministers in this representative sampling of the two conferences, but also for the variations in the gains and losses in odd and even calendar years. Fifteen (60 per cent.) of the 25 individuals show unlike signs when the two columns are compared, hence the reliability may well be expected to be low. (Cf. $r = +.32$.)

One disturbing factor in this item is the difference in accuracy of

local church records from which the annual reports are made. In the shifting city population, what was said of one church is true of others: "It has an excellent machinery for gaining and recording new members, but no machinery for accounting accurately the losses among the transients." Some ministers take the records as they find them; others have a passion for accuracy which leads them to "weed out" the membership roll as soon as they reach a new church (which probably accounts for the large "minus" in some of the first-year pastorates). In evident recognition of this source of error, the conference record blanks were changed once during the period covered by this study, to enter under separate divisions "members on roll" and "non-resident members." After this division appeared in the statistics, the "non-residents" were not included in the totals. This is actually the cause of some of the large negative numbers in a given year. But although a variable, it was considered to affect all the records.

Another disturbing factor is the wide divergence of type in communities served by some of the individual men, including, for example, student assistantships in large churches, rural circuits, residential sections of town or suburbs, and great "downtown" churches in New York or New England cities.

Cross-currents of mighty industrial, economic, and racial developments are the greatest and most baffling of all the variables affecting these figures. For example, let us trace one of the 50 per cent of the men showing a negative total for membership changes. Some of his pastorates have been in fields where the general conditions are known to this investigator (although the specific work of the man is not).

One pastorate was in a manufacturing village where the Protestant church-going residents had been superseded by the influx into a certain industry of foreign-speaking Roman Catholics, who filled all the available housing within the territory of that church. Another of his appointments was in a small but growing city where the same industrial-racial-religious change was complicated by the growing ambitions of the younger generation within the church itself. An appreciable percentage of the total membership was at that time between sixteen and twenty-four years of age. Within a short space of time so large a number of these had gone away to college and thence to professional life, or had married and moved away, or had identified themselves with a more "fashionable" church because of

their growing social ambitions, that not only was the numerical membership thereby much reduced, but the changes had also removed a large proportion of the church's active, vitalizing power to draw to itself new members.

Another appointment of this same individual was in a still larger city where business and real-estate trends were swiftly altering the entire section within a workable radius from the church center, from residences of home-owning or steady-renting families with growing children, on one side, to a manufacturing and men's boarding-house district. On the other, what residences remained became almost completely Jewish rather than Protestant. Under such circumstances habitual loss in membership totals is significant of the changing field and changing problems of the ministry as a whole, rather than of the possession or non-possession of certain personal traits by the individual minister.

To make the figures of gain or loss in church membership under a given minister a reliable measure of *any* trait, it will be necessary to have (1) accurate records, in which all losses as well as gains are accounted annually; and (2) some means of enumerating and measuring the factors, other than the individuality of the pastor, which enter into the local situation.

Taking up next the numerical and percentage increase or decrease in Sunday school membership, the results are as shown in Table VI, Part 2. Indisputably, the increase or decrease of Sunday school membership is in itself no indication of anything whatever about the minister in charge. It is quite plain that all the variant factors which disturb the reliability of church membership as an index are also at work upon the development and growth of any given Sunday school. In some of the fields occupied at different times by this random sampling of ministers, while it might be possible by special adaptations to build up a membership of transient industrial and boarding-house population, there might be no resident children to form a proportionally large school.

Moreover, while the church membership does in some degree reflect the individual differences in successive ministers (the correlation though small is positive), some churches feel that the Sunday school is entirely the province of the local officers and teachers; and some pastors feel that it should be, and leave it to their more or less efficient initiative. About all that is certainly shown by these figures is that there is no defined or general relationship between

the policy and conduct of the Sunday school and individual pastoral effort.

TABLE VI. PART 2

NUMERICAL AND PERCENTAGE INCREASE OR DECREASE IN SUNDAY SCHOOL MEMBERSHIP, 1902–1916

	Column A		*Column B*		(*Numerical*
Individ.	(1) Total	(2) Av. % Annual	(1) Total	(2) Av. % Annual	*Total A and B*)
1	218	.046	38	.045	256
2	35	.027	318	.04	353
3	34	.09	−111	−.01	123
4	141	.06	467	.22	608
5	−377	−.07	143	.01	−234
6	17	−.005	195	.06	212
7	48	.09	6	.06	54
8	423	.07	220	.06	643
9	20	.03	−187	−.03	−167
10	−69	−.017	58	.017	−11
11	439	.23	−138	−.05	301
12	−52	.02	138	.06	86
13	111	.075	11	.03	122
14	−97	−.01	95	.06	−2
15	84	.03	−93	−.04	−9
16	53	.02	21	.02	74
17	205	.17	−51	−.003	154
18	14	.002	7	−.01	21
19	−216	−.10	132	.10	−84
20	−270	−.005	99	.028	−171
21	119	.18	−110	−.09	9
22	17	.045	102	.04	119
23	12	.00	0	.004	12
24	−38	−.01	125	.07	87
25	−125	−.03	30	−.008	−95
Total	946	.027 [7]	1515	.03 [7]	2461

[7] Median, not total. Median of two halves together, +.03. From the median +.03 as the central tendency, a new table of individual deviations was made and the coefficient of reliability calculated between the odd- and even-year columns.

By the Pearson formula, $r = -.42$.

Quite different is the result shown in Table VI, Part 3, the numerical or percentage increase or decrease in contributions to the Mission Boards. The high reliability of these figures ($r = +.87$) might possibly have been expected from inspection of the like and unlike signs between the two columns of percentages, but the super-

ficial comparison between the numerical and percentage columns shows apparently startling discrepancies. For example, note Individual No. 10. How can a man who in even calendar years *annually increases* the missionary collection by 227 per cent show a *total deficiency* of $176 in the same period? The explanation is

TABLE VI. PART 3

NUMERICAL AND PERCENTAGE INCREASE OR DECREASE IN CONTRIBUTIONS TO THE MISSION BOARDS, 1902–1916

Individ.	*Column A* (1) Total	*Column A* (2) Av. % Annual	*Column B* (1) Total	*Column B* (2) Av. % Annual	(*Numerical Total A and B*)
1	$ −258	.15	$ 390	.22	$ 132
2	−7412	.85	4844	1.27	−2568
3	185	.05	−459	−.07	−274
4	279	4.35	172	2.07	451
5	−2269	−.04	2042	.18	−227
6	−309	−.11	283	−.05	−26
7	20	1.11	58	.96	78
8	−558	.12	979	.26	421
9	205	.11	−119	.09	86
10	−176	2.27	285	3.01	109
11	16	.25	−21	.31	−5
12	−53	.04	108	.31	55
13	−4	.11	108	.28	104
14	−37	.38	485	.66	448
15	434	.36	−50	.36	384
16	−111	.07	−17	.21	−128
17	639	.38	−325	.08	314
18	62	.71	20	.37	82
19	−3	.07	13	.01	10
20	91	.06	13	.12	104
21	−43	.23	−19	.23	−62
22	−27	−.09	−240	−.37	−267
23	72	.55	47	.83	119
24	−116	−.03	30	.05	−86
25	30	.06	16	.04	46
Total	$ −9343	.13 [8]	$ 8643	.23 [8]	$ −700

[8] Median, not total. Median of two halves together, +.21. With due consideration for the mode as well as the median of the two columns, +.20 was taken as the best expression of the central tendency. The necessary table of deviations was worked out and the reliability correlation calculated between the money-raising achievements of the odd- and even-years.

By the Pearson formula, $r = +.87$.

in the basis of comparison. The "deficiency" relates to the gain or loss, absolutely, compared with *each preceding* year. The rate is the average, in each pastorate, compared with what the church was paying the year before that minister's arrival. So it happens in this case; on a base of $60 as the total paid to both mission boards the last year of the preceding pastorate, the first year shows a payment of $135, or an increase of 125 per cent. When by special effort in another year the sum of $408 is raised, the payment of $285 the year following that, although it is a numerical loss, compared with the preceding year, of $123, is still an increase for the year of 375 per cent over the church's original basis.

So with Minister No. 17, who shows in his odd years an annual increase rate of 8 per cent. side by side with a net money loss, compared with each highest possible point, of $325. In his early years, on small country charges used to paying from $30 to $100 for Missions, he raised the general level of their giving to double or treble that amount, although the years showed fluctuations from this new, higher level. In later, larger churches, similar fluctuations from a level still in general higher than that reached by his immediate predecessors, might be in amounts between $100 and $200. A drop of $100 in a single year in a city church whose level of missionary giving had been raised from an average of $300 to an average of $600 would not push the average annual increase below the positive rate, but it would cancel numerically the $20 to $50 gains of several of the earlier years.

For this reason, while there is the difficulty, shown by the case of Ind. No. 10 with a long pastorate in a fast-growing church, that continuous comparison with the church's feebler years is not fair, in most of the twenty-five cases the *ability* of the local church was a sufficiently constant factor to make the basis of comparison with the year preceding each pastor's accession more just than either the mere fact of increase or decrease, or the total numerical amount thereof. It may be worth while to give a sample of the record of one church under different pastorates (Fig. 4) to show this constancy.

Here observe that the salary varies with the pastor rather than with the numerical strength of church membership; that the amount paid for Missions shows general trends, within fluctuating limits, for each of the pastorates, and that this trend is not a co-variant with the numerical church membership; and that variations in "missions" and "general benevolences" tend in general

to be in direct rather than in inverse (compensating) proportion to each other.

Year	*Pastor*	*Salary*	*Members*	*S. S.*	*Prop. Val.*	*Missions*	*Benev.*
1902	A. B.	$4,100	527	305	$91,000	$436	$1,058
1903	A. B.	4,100	524	357	91,000	262	1,537
1904	C. D.	2,600	574	309	91,000	462	1,102
1905	C. D.	2,800	603	374	91,000	474	1,351
1906	C. D.	3,000	626	313	91,000	640	1,664
1907	C. D.	3,000	588	298	90,000	640	2,050
1908	C. D.	3,000	542	322	90,000	700	1,633
1909	E. F.	3,000	548	315	90,000	670	1,796
1910	E. F.	3,000	608	403	90,000	420	1,722
1911	G. H.	3,000	552	419	90,000	950	1,863
1912	G. H.	3,000	422	478	90,000	810	2,078
1913	G. H.	3,000	409	367	90,000	600	2,741
1914	G. H.	3,000	377	381	94,000	670	14,933
1915	G. H.	3,000	409	406	94,000	690	1,556
1916	I. J.	2,400	458	433	90,000	511	1,564

FIG. 4. BUDGET FOR FIFTEEN YEARS OF A TYPICAL MEDIUM CITY "FIRST CHURCH"

In general, the comments on Part 4 of Table VI are the same as those on Part 3. Perhaps a little more frequently the detailed figures show some mighty effort for an unusual sum for some special object, followed by a drop to the level, or a trifle below that, of the preceding year. This explains the still wider divergence between the signs and the relative size of amounts and percentages. It also shows that as some concrete, nearer call may rouse a congregation to special efforts in giving, with or without reference to the efforts and purposes of the pastor, the amount paid to the denomination's constant but more distant responsibilities *via* the Mission Boards is, as one might expect to find, more dependent upon his plans and methods. So, while both figures have some positive reliability as a measure of individual traits of successive pastors, the amounts paid to the Mission Boards are a more reliable index than those given to the rest of the church benevolences.

It was part of the original plan, if the study of the data of the Conference Minutes proved fruitful for this sampling of twenty-five men, to carry out the method for two or three hundred, or as

TABLE VI. PART 4

NUMERICAL AND PERCENTAGE INCREASE OR DECREASE IN CONTRIBUTIONS TO OTHER BENEVOLENCES, 1902–1916

Individ.	*Column A* (1) Total	(2) Av. % Annual	*Column B* (1) Total	(2) Av. % Annual	(*Numerical Total A and B*)
1	$ 622	.33	$−637	.37	$ −15
2	−9935	1.40	22768	1.85	12833
3	400	.09	−1666	.11	−1266
4	1140	.70	1504	1.37	2644
5	2149	.52	−2503	.09	−354
6	1573	.66	−545	.18	1028
7	63	3.67	447	3.27	510
8	967	.04	2739	.49	3706
9	1036	.40	536	.24	1572
10	−45	.47	196	.58	151
11	250	−.03	−296	−.49	−46
12	254	.46	462	.53	716
13	−447	−.38	−34	−.32	−481
14	12560	.60	−12621	.15	−61
15	−210	.12	−82	.27	−292
16	511	.49	−301	.42	210
17	117	.36	−563	.01	−446
18	3	.52	145	.67	148
19	286	.69	−233	.13	53
20	4418	1.16	−4022	.29	396
21	377	.02	−343	−.09	34
22	−500	.62	509	1.27	9
23	160	.79	246	1.36	406
24	30	−.22	−371	−.39	−341
25	258	.37	−242	.15	16
Total	$16037	.47 [9]	$5093	.27 [9]	$21130

[9] Median, not total. Median of two halves together, between +.37 and +.40. Tabulating deviations from +.40 as the central tendency, the coefficient of reliability was calculated between the two columns. By the Pearson formula, $r = +.43$.

many as had been in the conferences a certain length of time. In view of the low reliability of most of the measures, the results that could thus be obtained would not justify the large amount of labor involved. However, it did seem worth while to use the best of the measures for correlation with the estimated abilities of these men, as a suggestion for what might be done in the future, when more reliable measures are available for some considerable body of ministers.

SUMMARY OF TABLE VI COMPARED WITH TABLE V. RÉLIABILITY COEFFICIENTS

Average Annual Increase or Decrease	*Per Cent*	*Plus and Minus*
Church Membership	$r = +.32$	$r = +.42$
Sunday School Membership	$r = -.42$	$r = -.04$
Contributions to Mission Boards	$r = +.87$	$r = -.011$
Contributions to Other Benevolences	$r = +.43$	$r = +.057$

4. A STUDY OF THE RELATION OF ADJUDGED ABILITY TO RECORDED ACHIEVEMENTS

Comparing the reliability measures obtained by the two methods and bearing in mind the explanatory comments regarding the significances of the gross annual differences in money contributions and the annual average percentages thereof, the following items were chosen for correlation with the four traits for which all the men had been judged:

1. Increase of Contributions to Mission Boards . . . . . $r = +.87$
2. Increase of Contributions to Benevolences . . . . . $r = +.43$
3. Percentage of Increase or Decrease, Church Memberships . . $r = +.42$
4. Payment of Money on Church Property and Improvements . $r = +.69$
5. Increase or Decrease of Own Salary . . . . . $r = +.09$

For the cross-correlations, five of the twenty-five ministers studied in the preceding section were omitted because they had been rated by fewer than four judges. For the remaining twenty the usual procedure was followed for finding the Pearson coefficients for the paired halves of each two sets of measures, and correcting for attenuation by the Spearman formula. Instead of attempting to find the central tendency of this small group the deviations in the four traits were taken from the median 3 because the significance of these measures lay in the man's ability relative to the general conference average. For the same reason the deviations in the five achievements were taken from the median of the entire twenty-five for whom the records had been tabulated. Note 3 gives the steps of the computations. It is interesting to note that the self-correlations for this group selected from five of the six classes are higher than for the average of all the classes in those traits. The self-correlation in the items of achievement varies somewhat but is in general higher for the twenty men than for the twenty-five.

Table VII gives the relations between the four traits judged by their associates and the five items from the 15 years' annual records.

NOTE 3. The details of the work for obtaining Table VII are as follows: (The numbers relate to the 4 traits).

CROSS-CORRELATIONS

I *a* with Missions *b* . . . . . + .58	I *b* with Missions *a* . . . . . + .40
I *a* with Benevolences *b* . . . . + .25	I *b* with Benevolences *a* . . . + .14
I *a* with Church Membership *a* . + .217	I *b* with Church Membership *a* . + .36
I *a* with Money Improvements *b* − .20	I *b* with Money Improvements *a* − .03
I *a* with Salary *b* . . . . . − .22	I *b* with Salary *a* . . . . . + .39
II *a* with Missions *b* . . . . . + .48	II *b* with Missions *a* . . . . . + .37
II *a* with Benevolences *b* . . . . + .16	II *b* with Benevolences *a* . . . + .16
II *a* with Church Membership *b* . + .49	II *b* with Church Membership *a* . + .55
II *a* with Money Improvements *b* − .02	II *b* with Money Improvements *a* − .03
II *a* with Salary . . . . . + .23	II *b* with Salary *a* . . . . . + .13
III *a* with Missions *b* . . . . . + .52	III *b* with Missions *a* . . . . . + .57
III *a* with Benevolences *b* . . . . + .28	III *b* with Benevolences *a* . . . + .07
III *a* with Church Membership *b* . + .30	III *b* with Church Membership *a* . + .92
III *a* with Money Improvements *b* − .11	III *b* with Money Improvements *a* − .09
III *a* with Salary *b* . . . . . + .11	III *b* with Salary *a* . . . . . + .24
IV *a* with Missions *b* . . . . . + .57	IV *b* with Missions *a* . . . . . + .21
IV *a* with Benevolences *b* . . . . + .21	IV *b* with Benevolences *a* . . . + .03
IV *a* with Church Membership *b* . + .50	IV *b* with Church Membership *a* . + .17
IV *a* with Money Improvements *b* + .18	IV *b* with Money Improvements *a* + .14
IV *a* with Salary *b* . . . . . − .01	IV *b* with Salary *a* . . . . . + .32

SELF-CORRELATIONS

Deviations of 20 Men from General Medians

I (Sermon ability) *a* and *b*	+ .91
II (Pastoral ability) *a* and *b*	+ .86
III (Executive ability) *a* and *b*	+ .84
IV (Evangel. ability) *a* and *b*	+ .73
Missions *a* and *b*	+ .86
Benevolences *a* and *b*	+ .81
Church Membership *a* and *b*	+ .48
Money Improvements *a* and *b*	+ .53
Salary *a* and *b*	+ .19

The reader will understand the abbreviations used in the tables hereafter.

Missionary means average annual percentage of increase or decrease of contributions to the Mission Boards.

Benevolences means average annual percentage of increase or decrease of contributions to all other benevolences.

Church Membership means average annual percentage of increase or decrease in the membership of the churches served.

Money Improvements means the algebraic total of "paid" or "not paid" on church property and improvements, regardless of amounts.

Own Salary means the increase or decrease of a man's salary over his own of each preceding year, regardless of amounts.

TABLE VII

CORRELATION OF ABILITIES WITH ACHIEVEMENTS. 20 CONFERENCE MEN FOR 15 YEARS

Sermon ability with Missionary	+ .54
Sermon ability with Benevolences	+ .22
Sermon ability with Church Memberships	+ .42
Sermon ability with Money Improvements	− .11
Sermon ability with Own Salary	+ .20
Pastoral ability with Missionary	+ .49
Pastoral ability with Benevolences	+ .19
Pastoral ability with Church Memberships	+ .78
Pastoral ability with Money Improvements	− .035
Pastoral ability with Own Salary	+ .42
Executive ability with Missionary	+ .64
Executive ability with Benevolences	+ .17
Executive ability with Church Memberships	+ .93
Executive ability with Money Improvements	− .15
Executive ability with Own Salary	+ .40
Evangelistic ability with Missionary	+ .44
Evangelistic ability with Benevolences	+ .14
Evangelistic ability with Church Memberships	+ .48
Evangelistic ability with Money Improvements	+ .14
Evangelistic ability with Own Salary	+ .48

Bearing in mind that the fewness of the men measured and the low reliability of the measures of achievements do not admit any certain deductions, nevertheless the figures as they stand show interesting trends.

1. The church which desires to increase its membership should seek first of all for a pastor with executive ability, and next with pastoral ability. It is evident that the "ability to see what details are necessary to make a project successful, to adapt them to changing conditions, to see that they are carried out and to work through others," and the pastor's personal interest in the members of the

church community have more to do with the power of a church to attract and assimilate new material than has the public appeal of sermons or the evangelistic effort to overcome hostility and indifference.

2. The probability that contributions to the Missionary Boards would depend more upon the efforts of the minister and his success in making sufficiently gripping the distant appeal than would the more concrete objects of "other benevolences" is borne out. The relationship of all four traits with missionary achievement (+.54, +.49, +.64, +.44) is from two to four times as close as that of these traits with benevolent contributions (+.22, +.19, +.17, +.14).

3. The popular idea that there is no particular relationship between preaching fine sermons and attending to the material details of church housekeeping, or that they "do not go together," seems to be borne out in these 20 instances, by the ratio of −.11. Strangely enough there is an even greater negative relation between executive ability and this particular achievement, while the only positive correlation is with evangelistic ability. These low and negative correlations combined with a fairly high self-correlation may indicate that there is no relation between this achievement and the four abilities considered, or that some disturbing factor is at work which is not brought out in the printed records.

4. It is somewhat startling to find that evangelistic ability has less influence on increase of church membership than any of the other traits except sermon ability. Although this trait has no stronger influence than that on church membership, yet its effect on the increase of the pastor's own salary is exactly the same. In fact, if a minister wished deliberately to work to increase his salary, these figures indicate that the surest way to do it would be to cultivate evangelistic ability. Fervor and enthusiasm dispose people favorably toward the minister who displays them.

5. The close correlation of *amount* of salary with ability as judged by associates, the low correlation of date of entrance with salary, and the slight effect of length of service on salary when the partial correlation was made for the entire 212 men without separating into groups (see Tables III and IV) point in the same general direction as the figures in Table VII. Here the record of each man's salary *increase* for 15 years correlates with his various abilities in

ratios of from only .20 to .48, while the self-correlation of salary increase among these 20 men is but .19. Whether the cause be that a man quickly reaches his "level" of worth, or that there is no elasticity in salary possibilities to allow for growing ability, the fact shows plainly from the study both of the group of 20 and of 212 that length of time in professional service has in general no close relation to salary received.

6. The chief conclusion is that the types of achievements recorded in the printed annual reports are not those by which a minister's "success" is to be most certainly judged. Contributions to the great missionary enterprises of the church form one real measure, for the reasons already detailed. For greater reliability as measures of anything the records of church membership need a uniform accuracy in annual revision. The significance of the numbers would be greatly increased if they were accompanied by figures showing such facts as are being gathered by many churches through a "community survey," or a religious census of the local field.

The statistics of Sunday schools proved to be useless as measures of anything whatever, yet the religious nurture of children and youth is one of the most important functions of the ministry. Careful records of the child population of the community as a guide to interpreting the numbers in attendance, and a standard of how many Sundays constitute a child an "attendant" would be the first step. Then a checking up with such standards as graded instruction and worship, trained teachers, organized activities, and pupils coming into church membership and into specific service in the church would afford measurable information about more vital elements in ministerial success than do the money value of church property and payments for material improvements.

PART II

A STUDY OF GRADUATES FROM THREE METHODIST EPISCOPAL THEOLOGICAL SCHOOLS

1. Introduction

Direction of the Inquiry. What sort of men are attracted to the work of the Christian ministry? Within what limits do individual variations among these men occur? Do they show any well-defined tendencies? Which are the characteristics favorable for success? How far may the possession of these characteristics be determined before or during the period of training for the ministry? These are problems significant for vocational guidance.

Source of Material. For investigation of these questions, the data were chosen as follows: For comparison with the foregoing studies of the Methodist ministry, men taking their training in theological schools preparing for that ministry would be under the operation of the same selective tendencies as those which determine the personalities and the standards of the Methodist ministry as a whole. Hence this study is limited to graduates from the three largest Methodist theological schools, Boston University School of Theology, Drew Theological Seminary, and Garrett Biblical Institute.

In order to have a number large enough for reliability without being unwieldy, the study was limited to the graduates of one decade. And in order that all the men should have had somewhat nearly the same opportunity for service after graduation, to compare the records of the later graduates with the earlier ones, the end of the decade was placed five years before the beginning of the study.

Thus the basis of this portion of the present inquiry is the characteristics and achievements of the men graduating from Boston University School of Theology, Garrett Biblical Institute and Drew Theological Seminary, during the years 1902–1911, inclusive.

Extent of the Material. For those graduates the objective data available consist of the office records of the grades reached in their theological studies, and the records in Annual Conference Minutes

	Spanish or Italian	
History	Ancient	
	General	
	European	
	American	
Mathematics	Pure	
	Applied	
Science	Biological	
	Physical	
	Chemistry	
	Geology	
	Astronomy	
Philosophy*	Introduction, History	
	Logic	
	Ethics*	
Psychology*	Descriptive	
	Experimental	
	Educational	
Social Sciences*	Economics	
	Social Theory	
	Descriptive Sociology	
	Practical Sociology	
Voice and Ear	Music and Singing	
	Elocution, Oratory	
	Speaking and Debate	

*If any of these were taken in the Theological School, mark T after the number.

	Church and Institutions	
History	Geography, Archæology	
	Missions, Evangelism	
Exegesis	Hebrew	
	Greek	
	English	
Doctrine	History and Development	
	Systematic Theology	
	Apologetics	
Practical Theology	Denominational Polity and Administration	
	Parish and Pastoral Problems	
	Homiletics	
	Praxis	
Comparative Religions	History and Philosophy of	
	Psychology of	
	Relation to Missions	
Social Science*	Social Theory	
	Social Problems and Laboratory	
Religious Education*	Educational Theory	
	Educational Material	
	Educational Problems and Laboratory	
Voice and Ear	Music, Singing	
	Elocution, Oratory	
	Speaking and Debate	

*If any of these were taken in the College or University, mark C after the number.

Consider now your *ability* at each of the ten activities when you were 8–14. Mark in column 2 with a 1, the activity at which your ability was greatest—that is, the one that you did best at, or think you would have done best at if you had had a chance to try it. Mark with a 2 the activity at which your ability was next greatest—that is, the one that you did next best at, or think you would have done next best at if you had a chance to try. Mark 3, 4, 5, 6, 7, 8, 9, 10 for the others according to your memory of what your abilities were. If your abilities in two or more were, in so far as you can judge, equal, give them the same mark.

Record similarly under column 4 your order of ability in these ten activities when you were 14–18.
Record similarly under column 6 your ability in each of these ten activities when you were 18–25.
Record similarly under column 8 your order of ability in these ten activities at the present time.

Read everything as far as Table II before filling out Table II. Read again and fill out Table III.

Let the value to your subsequent life and activities of a class-room hour of a fundamental English course be a unit of measure, and call it 10. Estimate the comparative value (whether "practical" or "inspirational") in your ministerial life of each course taken in your college work, by a number in the blank space following the appropriate heading; thus: if a class-room hour of Greek has had the same value as an hour of English, mark it 10; if twice as valuable, 20; if less valuable, 9 or less. If any course had no value to your life and work as a Christian minister, mark it zero. Place no mark after courses not taken.

In the same manner, mark the studies of your theological course with numbers indicating their value as compared with the same unit "10," as in Table II.

TABLE II.

Name of College or University..... Year of Graduation.....

ENGLISH	Analysis and composition	..10..
	Literature.....	.....
LANGUAGES..	Latin.....	.....
	Greek.....	.....
	French.....	.....
	German.....	.....

TABLE III.

Name of Theological School..... Year of Graduation.....

ENGLISH.....	Composition, Sermons	.....
	Literature.....	.....
LANGUAGES ..	Semitic	.....
	Greek.....	.....
	Oriental (and Phonics).....	.....
	Church and Institutions	

Name..... **Date of Birth**.....

Height (with shoes)..... **Weight (with ordinary clothing)**.....

Childhood environment: City..... **Village**..... **Country**.....

Struggle..... **Comfort**..... **Ease**.....

Special opportunities (specify).....

.....

Special responsibilities (specify).....

.....

Read everything as far as Table I before filling out any part of Table I. Then read again as you need, to fill out columns 1, 3, 5, and 7.

Consider your *interest* in or liking for each of the activities listed below during your early boyhood, 8–14 years. Mark in column 1 with a 1 the activity that was at that period most interesting to you of the ten listed. Mark with a 2 the one that was next most interesting; mark with a 3 the one that was next in interest, and so on. If two or more were, so far as you can judge, equally interesting, give them the same mark. If any had no interest, you were indifferent to it, precede the figure with a zero; if it was distasteful, with a minus sign (as 07, −8, −9, −10).

Record similarly under column 3 the order of interest of these ten activities when you were 14–18 years old.

Record similarly under column 5 the order of interest of these ten activities when you were 18–25 years old.

Record similarly under column 7 the order of interest of these ten activities for you now.

Record nothing under columns 2, 4, 6, and 8 until columns 1, 3, 5, and 7 are filled.

By **Bargaining** is meant swapping, trading, buying as cheap as possible, selling as dearly as possible, and the like.

By **Managing people** is meant bossing others, giving orders, deciding which person shall do each part of a game or task, persuading people to do certain things, getting people to agree, and the like.

By **Studying with books** is meant studying but *not* experimenting in a laboratory or learning to use machines or observing facts in nature.

By **Experimenting** is meant doing experiments in laboratories, copying or following directions for elec-

trical and mechanical toys, tricks or useful contrivances, trying and adapting directions for treatment of soil, seeds, live stock, and the like.

By **Planning and inventing** is meant drawing and making original models of boats, engines, and the like, devising useful contrivances about the house or shop, or devising new methods of doing things, but *not* routine work, or that planned and directed by others.

By **Observing facts in nature** is meant learning the size, shape, color, habits, names, or other characteristics of wild and domestic birds and animals, trees, plants, or physiographic or geologic formations.

By **Clerical work** is meant such work as arranging cards, comparing names or numbers, classifying written facts of name, number, date, address, and the like.

By **Mechanical work** is meant carpentering, blacksmithing, cleaning tools or machines, and the like.

By **Farm work** is meant chopping, hoeing, ploughing, digging, moving stones, planting, and care of poultry, animals, feeding, harnessing and driving horses, and the like.

By **Athletics and organized games** is meant participation in school or local field sports, team games, swimming, rowing, skating, and the like.

If at any of the four periods you had no chance to tell how great your interest was in an activity, judge as best you can how great your interest would have been if you had had a chance to engage in the activity.

TABLE I.

	1 | 2 8–14		3 | 4 14–18		5 | 6 18–25		7 | 8 Present	
	Interest	Ability	Interest	Ability	Interest	Ability	Interest	Ability
Bargaining								
Managing people								
Study with books								
Experimenting								
Planning and inventing								
Observing facts in nature								
Clerical work								
Mechanical work								
Farm work								
Athletics and organized games								

of their appointments held since graduation, with the uniform statistics of those charges. For those whose names no longer appear in the General Minutes of the denomination, the fact of their having left the ministry, and the causes therefor when ascertainable, were held to be of vocational significance.

To secure more individual and personal records, a copy of the accompanying questionnaire, with a letter explaining the purpose of the study, was sent to every accessible graduate.

The total number of graduates of the three schools for these ten years, as shown by the official records of degrees or diplomas conferred, was 1204. Of these 35 had died. For 135 no address or incomplete addresses could be found, 59 others were then residing in foreign countries, and on account of the difficulties of mail service in war time, no letters were sent to them. Hence the total number of questionnaires sent was 975. Replies with answers were received from 310, replies stating unwillingness or inability to answer the questions from 13, and letters were returned unclaimed from the given address for 23. The 310 questionnaires returned more or less completely filled out thus give personal data concerning 26 per cent. of the entire 1199 men, and represent almost one third of those presumably receiving requests.

All three of the schools included in this study now have a careful system of permanent records of all the grades of all the students, put into effect during or since the period under consideration; but only Boston had complete records of numerical grades for all the graduates for all ten years. In the other two schools, changing policies of grading, including, variously, percentages, a scale recorded in percentages but apparently reaching from 90 to 100 in tenths of one per cent, "A, B, C, D, and F," "Excellent, Very Good, Good, Poor," and a simple "Passed or Failed," were in effect successively or simultaneously. In Drew, for the members of the classes of 1902 and most of 1903, no records of grades have been preserved. In the ledger of those years were two or three blank forms showing that it had been the custom to give each student a statement of his grades each term.

Scope and Limitations. So much for a preliminary statement of the data at hand. "What are the standards and tests of 'success' in the Christian ministry? What factors of success are measurable, and by what scale?" These are the queries that seemed uppermost in the minds of the ministers questioned, and the reason assigned

for some of the refusals to reply was a general conviction that no just standard of "success" exists, and that the factors of "personality" are unanalyzable.

To quote one letter: "I am a little perplexed, also, to understand just what your questionnaire will discover. My observation is that the three things which most often explain success in the ministry are, (1) spiritual-mindedness, (2) personality, including (*a*) sympathy, (*b*) common sense, and (*c*) any pleasing peculiarity, and (3) egoistic ambition. I find none of these things indicated in your list.

"I am wondering, moreover, what is to be your *criterion* of success. If 'grade' or rank with respect to denominational prominence I should be a little suspicious of the utility of such an inquiry."

Criteria: Premises and Working Basis. One measure of success, capable of statistical handling, is the amount of salary received. This at once meets a storm of protest. The gist of these protests may be summed up as follows:

"Men worthy of the Christian ministry are not working for money; the man with greater egotism may secure the greater salary, while the one more successful in the real, spiritual aims of the ministry modestly goes on from one needy field to another, regardless of financial advancement."

"In any given conference the number of charges and the salaries paid by each remain practically stationary. When in the itinerary system a minister is to be moved, he is not ordinarily demoted in salary, and unless the incumbent of a higher-salaried pastorate dies or is transferred to another conference, he cannot be promoted; so there is no alternative but to move a series of men receiving approximately the same salary to another charge of the same 'grade.'[1] Where for reasons of local expediency a man is transferred from one conference to another, after the general shift one extra man is left standing like the lone player in 'Going to Jerusalem,' and if he is not to retire from the game he must in turn be transferred to some other conference."

"Those conferences in which a dearth of ministers occurs are in general those where the appointments offer the greatest hardships and the least salary. The ministers who go to these needy

[1] One Conference statistician has preserved tables showing for a series of twenty-five years the actual groupings of charges by salary "grades" within which similarly "graded" ministers were moved about.

fields must be those of high spiritual qualifications; but however great their *real* 'success,' the causes above enumerated act automatically to prevent recognition of growth in power and achievement by increase in salary."

All this is absolutely and undeniably true. But a statement of the problem in *relative* numerical terms shows that, nevertheless, "amount of salary received" *is* one of the indications of success. The higher salaries are in general paid by the churches larger in membership and hence in their actual or potential "sphere of usefulness." The personnel of the ministry is changing decade by decade, and, at a rate perhaps increased by the itinerancy habit, these larger churches are ever seeking the stronger men among the new material. Of this new material, namely, the men "joining conference" year by year, only a fraction are trained in theological schools. If the proportion receiving the larger salaries is demonstrably larger among these men than among the total membership of the conferences, then one or both of two factors are operating. The theological training is itself a factor in achieving the larger salary standard, or the men who seek such training are those whose individual endowment tends to bring them such success. If the proportion of higher-salaried men is the same among theological graduates as among the ministry in general, an analysis of the differences in the individual traits of the theological graduates holding the highest and those holding the lowest salaried positions may reveal those factors which apart from special training contribute to "success." So in any case, "salary received" has a scientific value as *one* measure of "success in the Christian ministry."

Another common measure of success is "prominence." Certain conference and denominational positions bring their incumbents before a wide public, denominational and general. These committee chairmanships, executive secretaryships, editorships, and professorships are in a wider or narrower sense elective, and selection to such offices and continuance therein implies "success" in the same sense as similar honors and recognitions in other professions. The number of theological graduates elected to these positions is capable of statistical handling.

These two ascertainable facts, comparative salary and comparative prominence, may therefore be taken as crude criteria of "success."

Personal and Environmental Factors Measured. What factors making up the individual's equipment for life are both significant

and measurable? Among such objectively reportable individual differences are physical make-up, conditions of early environment and experience, native interest and abilities, and the intellectual differences shown by definite reactions to identical, or sufficiently similar stimuli,—such as examinations or questionnaires.

As to physical make-up, the studies of Gowin, Folsom, and others have shown a definite relationship between the size and vitality of the bodily machine and the kind and quantity of achievement. Time is a factor in determining the individual norm both in physical development and in the amount of experience and achievement; hence the questionnaires asked for the date of birth, and the present height and weight. Early environment and experience are factors in sympathetic ability to handle men, and in ambitions and ideals. The outstanding classification of such environment is, socially and physically, into "country," "village," or "city," and economically into "struggle," "comfort," or "ease." That these divisions were sufficiently explicit in content seems clear from comments when such were added.

Thus far the answers received were practically complete. With the data for "individual interests and abilities," difficulties appeared. In selecting and describing traits for ranking, one could not expect ministerial patience and effort to cover more than ten, and omissions were bound to occur. "The things I was interested in seem largely omitted from your list," says one reply. "Bargaining" was perhaps an unfortunate caption for the trait described, as the replies indicate a common connotation in the clerical mind with "hard" or "sharp" bargaining, unfair advantage, sordidness, rather than the "economic sense" or "business acumen" acknowledged by some of those who noted "strong repugnance" to this trait as they understood it. On the whole, however, responses indicate that the ten traits chosen are common, intelligible, and sufficiently distinctive to indicate real personal differences in original interests and abilities.

Then there is the double difficulty that the order of interest and ability at the different periods required *subjective* judgments, based on *memory*. There were several protests at the "difficulty of self-analysis," and the "unreliability of memory—it must be mere guess-work." Ministers have not been trained to the use of mental and social measurements and two misapprehensions appeared frequently: that a judgment was of *no* value unless accompanied by a high feeling of certainty, and that what was desired was *absolute* in-

terest or ability instead of the *relative order* requested as distinctly as possible. Many modestly disclaimed "first-rate ability" in anything, others ranged all ten traits under only three or four figures of the scale, some used many blanks and zeros, and some frankly "gave up the puzzle." Hence of the 310 replies received, but 103 clearly and unequivocally arranged the eight columns in Table I of the questionnaire in order of merit.

Training Factors Measured. There was a far more spontaneous interest in the relative value of the subjects of their professional training, as shown both by the judgments recorded in Tables II and III of the answered questionnaires and by the supplementary comments and letters. Here again individuals (though fewer of them) were troubled by the unreliability of memory. More desired some means of equating separately the values of the subjects of the curriculum and the personalities by whom they were taught. Some of the constructive comments will be quoted in place. The number and completeness of the judgments on the vocational value of college and theological curriculum subjects is sufficient for deductions of value.

2. A Study of the Official Records

[An analysis of the data obtained concerning the graduates from Boston University School of Theology, Drew Theological Seminary, and Garrett Biblical Institute for the decade, 1902–1911.[2]]

SUMMARY OF DATA OBTAINED

The scope of the material stands out more clearly when the figures from the three schools are arranged in parallel columns. In Tables VIII and IX a fourth column shows the total for all three schools under each item.

[2] Except to three Boston graduates working in Mexico, and one Drew graduate in Cuba, no letters were sent to graduates residing in foreign countries. This omission was on account of the difficulty of mail service in war time. One Garrett missionary, home on furlough, received and filled out a questionnaire.

TABLE VIII

NUMERICAL SUMMARY OF QUESTIONNAIRES SENT AND REPLIES RECEIVED

	Boston		*Drew*		*Garrett*		*Total*
Graduates (official records) . . .	393		468		343		1204
Deceased	12		11		12		35
In Foreign Countries[2]	(18) 15		25	(20)	19	(63)	59
Supernumerary and Retired . . .	(19) 13	(11)	10	(17)	4	(47)	27
Withdrawn from Conference . . .	(10) 9		7	(6)	4	(23)	20
Others, address not found	26		36		26		88
Letters not sent	75		89		65		229
Letters Sent	318		379		278		975
Letters Returned Unclaimed . . .	9		7		6		22
Replies with Answers	122		92		96		310
Replies Refusing Answers	7		4		2		13

The replies received were classified as to completeness as follows:

Class I, all tables in figures . .	42	34	27	103
Class II, all tables partly figures	47	34	41	122
Class III, only part of tables . . .	33	24	28	85
	122	92	96	310

[2] See note, p. 45.

TABLE IX

OCCUPATIONS OF THEOLOGICAL SCHOOL GRADUATES, STATUS OF 1917

	Boston		*Drew*		*Garrett*		*Total*	
Graduates of 1902–11 living in 1916–17		381		457		331		1163
A. In Academic Positions	(32–1)	31	(29–1)	28	(16–1)	15		74
Foreign Schools	4		3		5		12	
Teaching when Died or Last Heard from	4		5		1		10	
B. In Executive Positions	(11–2)	9		19		9		37
Denominational and Interdenominational Boards	4		7		0		11	
City Mission and Church	2		2		1		5	
Philanthropies	1		1		1		3	
Field Agent, Hospital or Child Care	1		1		1		3	
Anti-Saloon League	1		2		0		3	
Y. M. C. A.	0		4		3		7	
Foreign Diplomatic	0		1		0		1	
Conference Field Sec'y.	0		1		3		4	
C. Editorial	0		3	3	0		0	3
D. Not in Active Ministry		46		45		58		149
Laymen and Women	0		2		8		10	
Supernumerary	11		7		14		32	
Located	1		2		4		7	
Retired	7		4		3		14	
Discontinued or Withdrawn	10		7		6		23	
Not in General Minutes, 1917	17		23		23		63	
Total not Preaching		86		95		82		263
Foreign Other than Teaching		14		22		15		51
Pastors and Dist. Sup'ts., U. S. A.[3]		281		450		234		965
[3] (Including)								
Congregational		3		3		6		12
Evangelical		0		1		0		1
Lutheran		0		0		1		1
M. E. Canada		1		0		2		3
M. E. South		1		6		1		8
Presbyterian		1		3		7		11
Protestant Episcopal		0		4		1		5
United Evangelical		0		2		0		2
Wesleyan (England)		0		1		0		1
		6		20		18		44

GRADES IN THEOLOGICAL SCHOOLS

Access to this confidential material was most courteously granted by all three schools, and every facility provided for copying the records in existence for the years included in this study. Boston University School of Theology alone among them has preserved complete records of the grades accorded all students in all of the subjects taught during the entire ten years considered. The officials of the other schools deprecated the fact that the value of such records had not at that time been sufficiently perceived by educators in general to insure their preservation. Provision is now made for such permanent records. If the use here made of both records and omissions shall be of any assistance to these and other educators in standardizing present records for future use, it will be, perhaps, some slight return for the present investigator's indebtedness for the cordial help received.

Boston University School of Theology. The system in use during the decade and continuing to the present (1918) is a percentage marking, "passing" at 70. To determine the reliability of these marks as criteria of the relative ability of the individual students, all of the marks of the 392 individual students for whom records were obtained were arranged in "random halves" irrespective of variations in elective subjects. In some few cases of students bringing credits from other theological schools for two or more years of graduate work (three full years subsequent to the Bachelor's degree are required for graduation), the marks are as few as 8 or 10. But in general, varying with the three-term or two-semester report system, the total number of grades recorded for each student was from 24 to 42.

In each half the median grade was taken as the central tendency. In fact, it most often corresponded with the mode. The close correspondence between the two halves of each man's markings, both in range of variation and in central tendency, was so evident from inspection that it seemed unnecessary to calculate the reliability correlation before using the figures as measures.

It was easy to find by inspection also the central tendency (median) of all the grades of each individual. These individual medians were used in determining the relative standing of each man among the whole number of graduates of the ten years. The distribution of these individual medians is given in Table X. The

same facts are shown graphically in Fig. 5, in which the markedly skew curve emphasizes what the figures show, namely:

(*a*) A tendency on the part of those giving the grades to constrict the range of differentiation between the performances of different students. A range of 30 steps above passing is allowed by the scale. Of these the individual medians cover 24, but 60 per cent of their entire number are within 5 steps of this scale (88–92 per cent).

(*b*) A tendency to over-high estimation. While the median of the individual medians falls upon the mode (90 per cent), that median is distant from the lower end of the scale 15 of the entire 24 steps (19 steps from the passing limit) and requires 74 of the 97 marks on the 16th step to reach the middle point. The upper half of the total covers but 7 steps beyond the mode (and includes but a quarter of the numbers falling on the mode), and those steps are within two of the perfection limit.

TABLE X

DISTRIBUTION OF INDIVIDUAL MEDIANS. BOSTON UNIVERSITY GRADES

Median Per Cent	*Number of Individuals*	
75	1	
76	0	
77	0	
78	2	
79	1	
80	6	
81	5	
82	7	
83	5	
84	3	
85	18	
86	13	
87	17	78
88	20	
89	24	
90	97	
91	52	
92	44	237
93	22	
94	21	
95	20	
96	8	
97	4	
98	2	
99	0	
100	0	77
	392	392

The result of these tendencies, as they affect this study, is to place the graduates on a dead level of high efficiency in acquiring the subject matter of theological training. This renders difficult a suitable differentiation for comparison with their subsequent

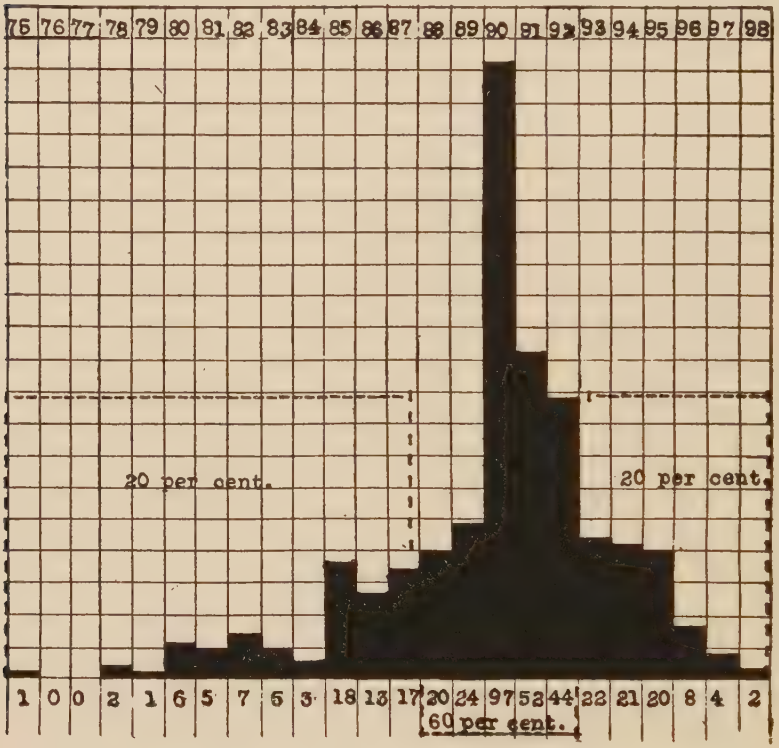

FIG. 5. Curve Showing Distribution of Individual Medians, Boston University School of Theology Grades. 1902–1911

achievements. The quartiles run so close to the central tendency that the highest and lowest quintiles, as indicated in the table, have been used, instead, for comparison and contrast.

Drew Theological Seminary. No records were preserved of the grades received by the class of 1902. Records are also missing for most of the class of 1903, and for an occasional individual in other years. The number of grades, and the proportion in letters and in figures, varied greatly between individual entries, even in those

of the same page of the ledger. Three random samples of individual records show the difficulty of devising methods for finding a just figure to represent a man's relative position in scholarship. (Fig. 6.)

	Heb. (O. T.)	*Gr. (N. T.)*	*Syst. Theo.*	*Bib. Geog.*	*Prax. Pub. Sp.*	*N. T. Int. & Lit.*	*Hist. Theol.*	*Pract. Theol.*	*O. T. Int. & Lit.*	*Median Chosen*
X	V. G.	E.	84.8	98	93	96		94	96	90.9
'05	E.	E.	95		96				E.	
	Not P.		92.2		E.					
Y	E.	95	97	98		100	97	E.	100	96.8
'08		E.	97.6	100			94	E.	E.	
			97.2					E.		
Z	V. G.	G.	89	90	G.	89	88	E.	85	88.3
'09			91			92	87	V. G.		

FIG. 6

For "random halves" an arbitrary dividing point had to be selected, anew with every differently arranged page. As far as possible this dividing point equalized the high-mark and low-mark subjects, although some individuals might have all high marks in one half and all low in the other, or have many more marks in one column than in the other.

When grades were given in figures they were frequently carried out to tenths per cent. One man's grade might be 94.3, another's 94.4 in the same subject; and in the face of such scrupulous care one felt diffident about attempting to assign values to letters! Fortunately in some of the subjects both letters and figures had been used in the same term. With due regard to this clue, and to the general range in the figures, the letters were assigned the following values: G, 85; VG, 90; E or Ex., 95. As the proportion of letters to figures was pretty even, the effect on individual grades was fairly constant.

The average of the grades in each column of the random halves corresponded closely enough with the median to serve as the central tendency of that column, and the arithmetical mean of these two was taken as the basis for calculating deviations and making comparisons. These medians were generally in fractions, and the distribution was therefore first made by tenths per cent., ranging from 79.7 to 99.3. These marks were readily grouped in the regular percentage scale by including as 80 per cent. all from 79.6 to 80.5,

as 81 per cent all from 80.6 to 81.5, and so on. The result of this was Table XI. The same facts are shown graphically in Fig. 7.

Here, too, the curve skews overwhelmingly to the upper end of the scale. There was no way of determining the passing mark. No grades in figures were below 70, but no median was below 80. Hence this scale has but twenty steps (cf. 24 for Boston). The lowest quintile covers eleven of these steps, 80–91 per cent, and the highest quintile but four. The remaining 60 per cent are compressed within four steps. The mode and the median both fall at 94, within five steps of the highest grades given, and only six steps from the perfection limit.

The general tendencies emphasized are therefore the same as those pointed out in the preceding table.

TABLE XI

DISTRIBUTION OF INDIVIDUAL MEDIANS. DREW SEMINARY GRADES

Median Per Cent.	*Number of Individuals*	
80	1	
81	0	
82	2	
83	1	
84	1	
85	2	
86	6	
87	6	
88	4	
89	10	
90	18	
91	20	71
92	30	
93	55	
94	66	
95	61	212
96	45	
97	21	
98	4	
99	2	
100	0	72
	355	355

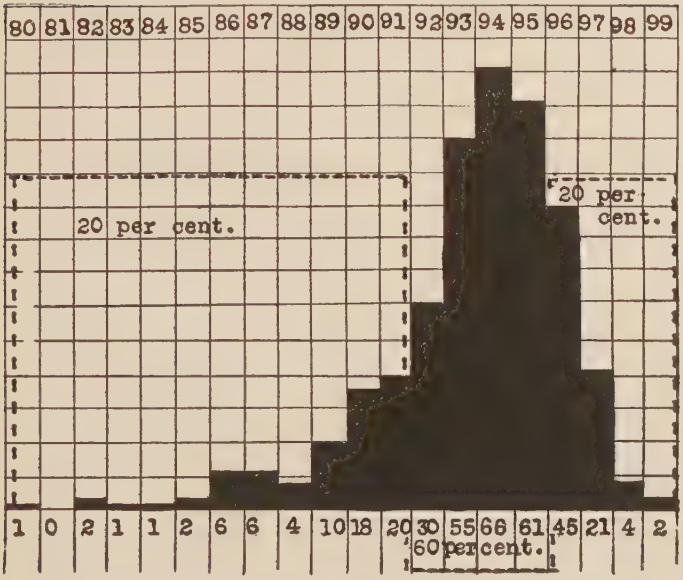

FIG. 7. Curve Showing Distribution of Individual Grades, Drew Theological Seminary. 1902–1911

Garrett Biblical Institute. In this institution the records were complete with the exception of four individuals. The degree of B.D. had been given to 138 college graduates. The 205 graduating in the Diploma course may or may not have had part or all of a college course. Part of the grades were in figures and part in letters. The letters seemed to be used according to two systems, one a simple "passed" or "failed" (P and F) and the other ranging from P to A. With what clues were available by inspection, the following numerical values were assigned to the letters: F, 60; C, 75; G, 80; B, 85; E, 90; A, 95. As it was impossible to tell what value to assign P, the mark was consistently omitted. The other grades were sufficiently numerous to give at least a probable value to the measures obtained from them alone. For convenience the first and second semesters were chosen for the random halves.

After trying out several random samplings, it was found that the medians so closely approximated the arithmetical average, in each column and between the columns, that to save time the

average was used. The distribution of these individual medians [4] is shown in Table XII, and graphically in Fig. 8.

TABLE XII

DISTRIBUTION OF INDIVIDUAL MEDIANS. GARRETT BIBLICAL INSTITUTE GRADES

Median Per Cent.	*Number of Individuals*	
"Pass"	1	1
73	1	
74	2	
75	2	
76	3	
77	6	
78	5	
79	9	
80	11	
81	13	
82 [5]	16	68
83	30	
84	21	
85	38	
86	33	
87	28	
88 [6]	35	205
89	21	
90	21	
91	9	
92	6	
93	5	
94	2	
95	2	66
	340	340

The number of steps is one less than that covered by the Boston medians and three more than the Drew scale, but the curve is more nearly normal. The mode falls on the middle step, and the median on the one above. The upper quintile includes seven steps to balance the 10 of the lower quintile, and the highest medians are five steps from the perfection point. This tendency to recognize

[4] The quintiles required an average of 68 names. By removing four which were 82+ to the 83 column, the lower quintile included all of the individual medians between 73 and 82. Removing eight marks of 89− to the 88 column, left 66 between 89 and 95 inclusive for the upper quintile.

[5] 4 grades of 82+ counted as 83.

[6] 8 grades of 89− counted as 88.

wider variations in individual performance stands out plainly as one traces the whole series of grades. Most of the instructors seemed to feel free to give the same man in the same subject grades several steps apart and to distribute their students over almost the whole range. This is a wholesome tendency and if the grades were all in a single system of either letters or figures, the marks would have a high reliability as measures.

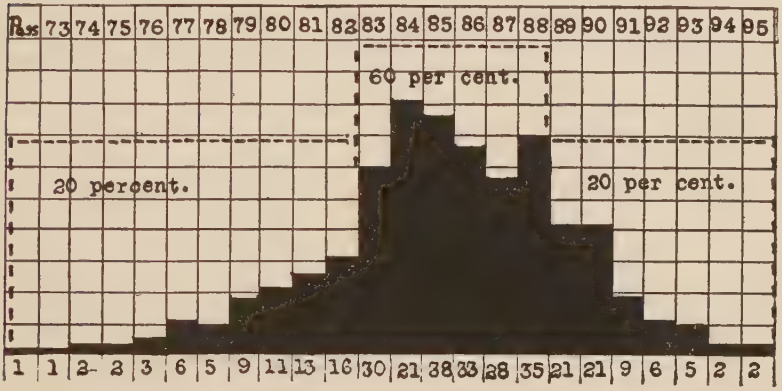

FIG. 8. Curve Showing Distribution of Individual Medians. Garrett Biblical Institute. 1902–1911

PROFESSIONAL AND GEOGRAPHICAL DISTRIBUTION OF THEOLOGICAL SCHOOL GRADUATES

What are the graduates doing? The avowed purpose of the theological schools is to train men for the Christian ministry, and the "ministry" is generally interpreted as signifying pulpit and pastoral work. The analysis of present occupations of graduates (Table IX) shows that 965 of the living graduates are in regular ministerial work. But this table also shows a relatively small but well defined group of 114 men who were or had been distributed among occupations connecting with the "ministry" only by religious purpose or denominational organization. As to professional or vocational import, they are allied with teaching, journalism, social and business executive work.

Another differentiation may be made in regard to the 63 workers in foreign fields. While the Minutes give their appointment both to pastoral and evangelistic duties, and to the professions just

named, one at all familiar with the actual work of such men realizes that there is a certain pioneering initiative and adaptability demanded, by conditions not capable of such "standardizing" as prevails in ministerial work in the home country.

Who are the men who leave the pastorate? It is evident from the study of the individual cases that many of these men go direct from the theological school into these non-pastoral vocations. Is the vocational training offered by the theological school adapted to such specializations? Are there any special tendencies in the men drawn into these other occupations which might be discovered in time to deflect them to more specialized preparation, either by extending the range of electives in these schools or by suggesting other professional schools?

A comparison of the median grades of the individuals of these graduates with the distribution of the median of the schools as a whole is interesting. (See Tables XIII to XVI.) While the data at hand show many gaps, certain trends or tendencies do stand out. The limitations in determining the precise scholarship ranking, the lack of record marks of some of the specially prominent men, and the inaccessibility of figures recording the income of any of the graduates except those in the pastorate or district superintendency of the Methodist Episcopal Church all tend to make deductions more or less general. Nevertheless the partial answers are interesting.

Grades of Educational Men. Of the group of College, University, and Theological School Presidents, Vice-Presidents and Deans, records of fourteen have been preserved. Just one has a grade less than the median of all the graduates and that comes in the lowest fifth. The grades of two others fall on the median. Of the eleven above the median six are in the highest fifth of all the graduates. (See Fig. 9.)

Among the College and University Professors one has no record, two fall below the median, three on the median, and of the twenty above the median, ten are within the upper fifth.

Of the Theological School Professors, three have no records, none are below the median, three are on the median and of the ten above the median, seven are in the highest fifth.

TABLE XIII

BOSTON GRADUATES, 1902–1911, IN EDUCATIONAL (ACADEMIC) WORK

Indiv.	*Deviation from Median Grade*	*Position*
1	+ 8	President Theological School
2	+ 8	Professor Theological School
3	+ 7	College Professor
4	+ 6	Professor Theological School
5	+ 6	University Professor
6	+ 6	University Professor
7	+ 5	Professor Theological School
8	+ 4	University Professor
9	+ 4	Director American College (Foreign)
10	+ 3	College President
11	+ 3	Professor Theological School
12	+ 3	University Professor
13	+ 2	University Professor
14	+ 2	Dean Theological School
15	+ 2	College Professor at time of death
16	+ 2	Professor Theological School (Foreign)
17	+ 2	College Professor
18	+ 2	Professor State Normal School (College)
19	+ 2	Chancellor University
20	+ 1	College President
21	+ 1	College President
22	+ 1	University Professor
23	+ 1	Principal Secondary School
24	+ 1	Teacher Secondary School (Foreign)
25	0	College President
26	0	Dean of College
27	0	Professor Theological School (Foreign)
28	0	Professor Theological School
29	0	College Professor
30	0	College Professor
31	− 1	College Professor
32	− 5	"Teaching when last heard from"

SUMMARY

Deceased	1	College, University or Theological School	
Retired	1	Directors, Chancellors or Presidents	7
Not on Present Records	2	Secondary School Principals	3
Incomplete or Uncertain		College or Graduate School Deans	2
Address	3	College or University Professors	13
Foreign Countries	4	Theological School Professors	7
		Not Known	1

TABLE XIV

DREW SEMINARY GRADUATES, 1902–1911, IN EDUCATIONAL (ACADEMIC) WORK

Indiv.	*Deviation from Median Grade*	*Position*
1	No record	College President (foreign)
2	No record	College President
3	No record	College President
4	No record	College Professor
5	No record	Professor Theological School
6	No record	Professor Theological School
7	No record	Professor Theological School
8	No record	President Secondary School
9	No record	Sup't. Secondary School (foreign)
10	+ 3	College President
11	+ 3	Professor Theological School
12	+ 3	University Professor
13	+ 3	University Professor
14	+ 2	University Professor
15	+ 2	Professor Secondary School (not known)
16	+ 1	College President
17	+ 1	President Secondary School
18	+ 1	Professor Theological School
19	+ 1	Professor Theological School
20	+ 1	University Professor (foreign)
21	+ 1	College Professor
22	+ 1	"Teaching, not known"
23	0	University Professor
24	0	Professor Theological School (died)
25	− 1	College Professor
26	− 1	Professor Secondary School
27	− 1	Professor Secondary School (not known)
28	− 3	College President
29	− 6	President Secondary School

SUMMARY

Deceased	1	College or University Presidents	6
Not on Present Records	4	Secondary School Principals	4
Incomplete Address	2	College and University Professors	8
Foreign Countries	3	Theological School Professors	7
		Secondary School Teacher	1
		Not known	3

TABLE XV

GARRETT BIBLICAL INSTITUTE GRADUATES, 1902–1911, IN EDUCATIONAL (ACADEMIC) WORK

Indiv.	*Deviation from Median Grade*	*Position*
1	+ 7	Vice-President College
2	+ 5	University President
3	+ 5	Professor Theological School
4	+ 5	Professor Theological School
5	+ 5	University Professor
6	+ 4	College Professor
7	+ 4	Principal Secondary School (foreign)
8	+ 4	"Teacher"
9	+ 3	College Professor
10	+ 1	College Professor (foreign)
11	+ 1	College Professor
12	+ 1	College Professor (not known)
13	− 1	Principal Secondary School (foreign)
14	− 1	Principal Secondary School (foreign)
15	− 3	Sup't. Preparatory School (foreign)
16	− 7	Pres. Secondary Bible School (foreign)

SUMMARY

Not on Present Records	1	College & University Pres. & Vice-Pres.	2
Leave of Absence	1	Secondary and Training School Principals	5
Foreign Countries	5	Not Known	2
		College and University Professors	5
		Theological School Professors	2

TABLE XVI

SUMMARY OF GRADUATES IN ACADEMIC POSITIONS

Educational	*Boston*	*Drew*	*Garrett*	*Total*
College, Univ., Theolog. School Pres., Vice-Pres. and Deans	9 (1 for.)	6 (1 for.)	2	17 (2 for.)
College and Univ. Professors	13	8 (1 for.)	5	26 (1 for.)
Theol. School Professors	7 (2 for.)	7	2	16 (2 for.)
Secondary and Training School Principals	2	4 (1 for.)	5 (5 for.)	11 (6 for.)
Secondary School Teachers		1	0	1
Not Known	1	3	2	6
Totals	32	29	16	77
Deceased	1	1	0	2
Retired	1	0	0	1
Not on Present Records	2	4	3	9
Incomplete or Uncertain Address	3	2	1	6
Foreign Countries	4	3	5	12

Presidents	No record	3,	+8,	+7,	+5,	+4,
	+3,	+3,	+2,	+2,	+1,	+1,
	+1,	0,	0,	−3.		
College and University Professors	No record	1,	+7,	+6,	+6,	+5,	+4,
		+4,	+3,	+3,	+3,	+3,	+2,
		+2,	+2,	+2,	+2,	+1,	+1,
		+1,	+1,	+1,	0,	0,	0,
		−1,	−1.				
Theological School Professors	No record	3,	+8,	+6,	+5,	+5,
	+5,	+3,	+3,	+2,	+1,	+1,
	0,	0,	0.			
Secondary and Training School Principals and Teachers	No record	2,	+4,	+1,	+1,	+1,
	−1,	−1,	−1,	−3,	−6,	−7.
Not Known	+4,	+2,	+1,	+1,	−1,	−5.

FIG. 9. SUMMARY OF GRADES OF EDUCATORS. (Variations from Medians of Own School.)

Of the Secondary and Training School Principals and Teachers, two have no records. Of the six below the median, three are in the lowest fifth of all the grades, and none falls on the median. Of the four above the median, only one is in the highest fifth.

Six individuals whose present work is not known were teaching when last heard from. One of these is recorded as a college professor and two as secondary school teachers; the others simply as "teaching." Their grades are, two below the median and four above, with one each in the lowest and highest fifths.

A study of the negative deviations is of interest. Of the entire 68 whose records are preserved only 11, or 16 per cent, are below the median grade of the entire number of graduates. Six of the 11 are only one step below. Of the remaining five, one has been lost track of. Two are superintendents of foreign training schools, and, as has been suggested, the necessity of manning work that has been commenced compels missionaries to attempt many kinds of work that they would not otherwise choose.

TABLE XVII

BOSTON GRADUATES, 1902–1911, IN EXECUTIVE WORK

Indiv.	*Deviation from Median Grade*	*Position*
1	+ 5	Sup't. Deaconess Home (died)
2	+ 4	Sup't. City Mission Society
3	+ 4	Sup't. Deaconess Home (died)
4	+ 2	Secretary State Board of Charities
5	+ 2	Anti-Saloon League
6	0	Sec'y. State Children's Society
7	0	Dep't. Sup't. Denominational Board
8	0	Field Sec'y. Denominational Board
9	− 1	Field Sec'y. Denominational Board
10	− 4	Sup't. City Mission Society
11	− 6	Field Sec'y. State Sunday School Ass'n.

TABLE XVIII

DREW SEMINARY GRADUATES, 1902–1911, IN EXECUTIVE WORK

Indiv.	*Deviation from Median Grade*	*Position*
1	—	Interdenominational Board
2	—	Editor Denominational Publication
3	—	Ass't. Ed. Interdenominational Pub.
4	+ 4	Editor Denominational Publication
5	+ 4	Denominational Board
6	+ 3	Anti-Tuberculosis Ass'n.
7	+ 2	Denominational Board
8	+ 2	Fiscal Agent Hospital
9	+ 1	Denominational Board
10	+ 1	Anti-Saloon League
11	+ 1	City Federation of Churches
12	+ 1	Interdenominational Board
13	+ 1	Conference Field Secretary
14	+ 1	Y. M. C. A.
15	0	Y. M. C. A.
16	0	Denominational Board
17	− 1	Foreign Diplomatic Service
18	− 1	Denominational Board
19	− 2	Y. M. C. A.
20	− 2	Y. M. C. A.
21	— 2	Anti-Saloon League
22	— 3	Sup't. City Mission Society

TABLE XIX

GARRETT BIBLICAL INSTITUTE, 1902–1911, IN EXECUTIVE WORK

Indiv.	*Deviation from Median Grade*	*Position*
1	+ 5	Y. M. C. A.
2	+ 4	Conference Field Secretary
3	+ 3	Field Secretary for Hospital
4	+ 2	Y. M. C. A.
5	+ 1	Y. M. C. A.
6	− 1	Conference Field Secretary
7	− 1	Editor Mission Press (Foreign)
8	− 3	Conference Field Secretary
9	− 4	International Sunday School Ass'n. (foreign)
10	− 4	Sup't. City Philanthropy

For Summary of Executive Positions see Table IX.

Grades of Executives. First looking at this group as a whole, the distribution of grades is as follows: lowest one-fifth, 6; others below the median, 8; on the median, 5; above the median, 11; besides 10 in the highest fifth. That is, of the 40 records, 25 per cent instead of 20 per cent were in the highest fifth of scholarship, and 15 per cent instead of 20 per cent in the lowest fifth, while the distribution of the remaining 60 per cent is about equal to that among the rest of their classmates.

The denominational and interdenominational boards and institutions range all the way from field secretaries of the Boards of Sunday Schools or Foreign Missions to Superintendent of a Deaconess Home or Fiscal Agent of a hospital (see Table IX). There are records of the theological school grades of 19 of the 20 people thus

Denominational and Interdenominational Boards and Institutions	No record 1, +5, +4, +4, +4, +3, +2, +2, +1, +1, +1, 0, 0, 0, −1, −1, −1, −3, −4, −6.
City and State Social and Philanthropic Organizations	+4, +3, +2, +2, +1, +1, 0, −2, −3, −4, −4.
Y. M. C. A.	+5, +2, +1, +1, 0, −2, −2.
Editors	No record 2, −4, −1.
Foreign Diplomatic Service	−1.

FIG. 10. SUMMARY OF GRADES OF EXECUTIVES

engaged. Six of them fall below the median and 3 of these are in the lowest fifth of all the grades. Three are on the median and 10 above. Of these, 6 are in the highest fifth in scholarship.

The organizations listed as social and philanthropic include City Missionary Society, State Charitable Associations, National Anti-Tuberculosis Association, State and National Anti-Saloon League and others (See Table IX). Of the 11 men thus engaged, 4 had grades below the median, one on the median, and 6 above. Three are in the lowest fifth and 2 in the highest.

The remaining individuals classified as executives include 7 in various phases of Y.M.C.A. work, 4 editors and one Chinese gentleman who was, at last accounts, Assistant Secretary of Foreign Affairs in a former governmental cabinet. For two of this group, there are no records. Four are below the median, one on the median and 5 above. None are in the lowest fifth and two are in the highest.

There are too few cases to justify any conclusions as to the distribution, as regards scholarship, between the denominational and other executive interests.

TABLE XX

BOSTON GRADUATES, 1902–1911, IN FOREIGN MISSIONARY SERVICE

Indiv.	*Deviation from Median Grade*	*Country*
1	+ 5	India
2	+ 4	Chile (Educational)
3	+ 3	Java
4	+ 2	China
5	+ 2	China (Educational)
6	+ 2	Mexico
7	+ 1	Africa (Educational)
8	0	Singapore
9	0	India (Educational)
10	0	Korea
11	0	Mexico
12	− 1	China
13	− 3	Mexico
14	− 5	Japan
15	− 5	China
16	− 7	Japan
17	−10	Philippines
18	−11	Sweden (not known)

Grades of Missionaries. Of the 63 men in foreign service, 9 have no records. Eight grades are on the median, with 23 above and 23 below. Of those whose grades are recorded one-fifth would be eleven; 16 are in the lowest one-fifth and 9 in the highest.

TABLE XXI

DREW SEMINARY GRADUATES, 1902–1911, IN FOREIGN MISSIONARY SERVICE

Indiv.	*Deviation from Median Grade*	*Country*
1	—	China (Educational)
2	—	Argentina
3	—	Japan
4	—	China (Educational)
5	—	Maylasia
6	—	India
7	—	Korea
8	—	Newfoundland
9	+ 2	China
10	+ 2	England
11	+ 1	Russia
12	+ 1	Cuba
13	+ 1	China (Educational)
14	+ 1	Japan
15	+ 1	China
16	+ 1	Japan
17	0	Korea
18	0	Africa
19	− 1	China (Diplomatic)
20	− 1	England
21	− 3	Argentina
22	− 3	Syria
23	− 4	France
24	− 4	Japan
25	− 8	Japan

Inspection of Tables XX–XXII and Fig. 11 shows that the negative deviations are very large. In general the men with the lowest grades in educational work are found in the missionary schools. This suggests that exigency rather than voluntary choice has given them these positions. This is borne out by the fact that most of the missionaries in educational work have also executive and evangelistic duties.

Deductions from Data of "Other Occupations." Is anything surely to be concluded from the data just summarized? The numbers are

TABLE XXII

GARRETT BIBLICAL INSTITUTE GRADUATES, 1902–1911, IN FOREIGN MISSIONARY SERVICE

Indiv.	*Deviation from Median Grade*	*Country*
1	—	Korea
2	+ 6	Korea
3	+ 5	Japan
4	+ 4	India
5	+ 4	Philippine Islands
6	+ 3	India
7	+ 2	India
8	+ 2	India
9	+ 1	India (Educational)
10	0	Korea
11	0	Africa
12	− 1	Africa (Educational)
13	− 1	Chile
14	− 1	India (Educational)
15	− 2	Philippines
16	− 3	Japan (Not in Minutes)
17	− 3	India (Educational)
18	− 4	Uruguay
19	− 5	China (Not in Minutes)
20	− 7	Chile (Educational)

too few, too many grades are missing, and the figures chosen to represent each individual's scholarship contain too many elements of uncertainty to answer unqualifiedly. But certain tendencies do show very plainly.

1. The men with the highest rank in the theological schools tend to enter educational work. Of those at the head of educational institutions of college or graduate rank, as far as we have records, 43 per cent stood in the highest 20 per cent in scholarship. The professors in colleges and universities have 40 per cent of their number in this quintile. Of the theological professors for whom we have records, 54 per cent are in this highest rank.

2. The secondary and training school principals and teachers are as a whole distinctly of a different type. Only 10 per cent are in the highest 20 per cent; while six of the 10 individuals are below the median and 30 per cent are in the lowest fifth.

3. While somewhat more than a proportionate number of the men in executive and social positions are of high scholarship rank, that

trait does not seem to be a controlling factor in their choice of such work.

4. The correlation of high scholarship with choice of the missionary field would seem to be slightly negative, as far as the present figures show.

No Record		9
Highest Fifth		+6, +5, +5, +4, +4, +4, +3, +2, +2.
Others above Medians		+3, +2, +2, +2, +2, +2, +1, +1, +1, +1, +1, +1, +1.
On Medians	0,	0, 0, 0, 0, 0, 0, 0.
Below Medians (besides)		−1, −1, −1, −1, −1, −1, −2.
Lowest Fifth		−3, −3, −3, −3, −3, −4, −4, −4, −5, −5, −5, −7, −7, −8, −10, −11.

FIG. 11. SUMMARY OF GRADES OF MISSIONARIES

In this connection an observation of Professor Hollingworth is worth quoting: "One who does anything well could have done almost anything else well if he had cared to try. But the degree to which one *cares* is not measured by reaction-time or cancellation tests." While we must pay due attention to the "overwhelming importance of incentive, motive, attitude and purpose and the large part they play in determining the possible achievements of a nervous system," yet the actual achievements of a nervous system give some indication of its possibilities. One man whose grades in the first term each of Hebrew and Greek were between 40 and 50 per cent gave up those studies and graduated in an English diploma course—then went as a missionary to China! He is not now in the Minutes nor was any further record obtainable.

Grades of Seminary Men and Ability in Four Traits. In the membership of the two conferences studied in Part I were fifty-six men who had graduated from Drew Theological Seminary during the decade under consideration. Some of these had no records of scholarship grades, and some others had been rated by fewer than four judges. Omitting these left a group of thirty-nine Drew graduates whose seminary grades were available and whose abilities in the four ministerial traits had been estimated by four or more judges. Proceeding in the usual manner of cross-correlating the random halves of the deviations of each man's grades (from the central tendency of the entire group of graduates) with the *a* and *b*

columns of his deviations in the four traits (from the central tendency 3) and finding the self-correlations of this group in both grades and traits (to correct for attenuation), we have the following results:

Sermon Ability and Theological Grades	+ .079
Pastoral Ability and Theological Grades	+ .44
Executive Ability and Theological Grades	+ .43
Evangelistic Ability and Theological Grades	+ .077

The probable errors in the ratios are so large that conclusions must wait until a larger number of cases can be studied.

RELATION OF THEOLOGICAL SCHOOL GRADES TO OCCUPATION AND INCOME

Another way of getting at the relation between scholarship and occupation is to see what the highest one-fifth and lowest one-fifth of the graduates are actually doing and, as far as possible, what their income is. Tables XXIII and XXIV give this information in summarized form.

By comparing Table IX with Table XXIII we see that 965 of the 1163 living graduates are in the pastorate. The normal distribution would put 40 per cent of these in the highest and lowest quintiles of scholarship. There are, including district superintendents, 279, which is barely 29 per cent. On the other hand, 62 of the entire number of graduates were in academic positions in the United States and 21, or more than one-third of them, were in the highest quintile; while only two, or a little more than 3 per cent, were in the lowest 20 per cent in scholarship.

In the entire number of graduates there were 40 men in executive and editorial positions. Of these, the 9 in the highest fifth form only a fraction more than 20 per cent, and the 5 in the lowest fifth a larger fraction less. Of the total of 149 graduates entirely out of the ministry or related work, fewer than 11 per cent are from the highest fifth and 29 per cent are in the lowest fifth. So while the highest and lowest grades together have their normal share of withdrawals, those having the lowest grades tend to withdraw from the work for which they took their training about three times as frequently as those in the highest rank.

The number of women is so small that no conclusions can be drawn. It is, however, interesting to note that the entire number of women graduating during the decade was nine. Of these, 8 were in the highest quintile, one in the lowest and none in the middle or average section. Their occupations were:

"Congregational Church" (Pastor ?)	1
Pastor's Assistant	1
Pastor's Wife	2 (3 ?)
Superintendent, Deaconess Home	2 (deceased)
No Record	3

For the last three, the records gave post office addresses only. Questionnaires were addressed to them but one was returned undelivered, and another was returned with the reply that as she "had not the honor to be either a man or a minister" her data could be of no value.

TABLE XXIII

All Seminary Grades. Highest and Lowest Fifths

	Boston		*Drew*		*Garrett*		*Total*	
Status of 1917	98–93	75–86	99–96	80–91	95–89	73–82		
	H 1/5	L 1/5	H 1/5	L 1/5	H 1/5	L 1/5	H 1/5	L 1/5
Deceased	3(2w)	1	3	0	3	2	9	3
Lost Track of	0	8	4(2t)	11	5(2w)	12	9	31
No Address but in Other Denomination	2	0	1	2	1	0	4	2
Leave of Absence	1	1	0	0	0	0	1	1
Supenumerary	3	2	1	1	4	1	8	4
Located or Retired	0	3	1	2	1	3	2	8
Discontinued or Withdrawn	4	1	0	1	0	1	4	3
"Laymen"	0	0	1	0	1(w)	1	2(1w)	1
Teaching or School Executive U.S.	10	0	5(2L)	2	6	0	21	2
Editing	0	0	1	0	0	0	1	0
Executive and Social (incl. Y. M. C. A.)	2	2	4	1	2	2	8	5
Chaplain	1	2	0	0	0	0	1	2
Foreign (Pastoral and Teaching)	4	4	4	3	3	5(2L)	11	12(2L)
Dist. Sup't. (U.S.)	2	1	1	1	1	1	4	3
Pastorate, U. S. (Wife, Assistant)	45(1w)	53	48	47	39(2w)	40(1w)	132(3w)	140(1w)
Conference Evangelist	0	0	0	0	0	2	0	2
Women (included above)	3	0	0	0	5	1	8	1
Total	77	78	72	71	66	68	215	217
Replies Received	26–1	19–1	16	12	22–1	14	60–2	35–1

Out of the Ministry (Permanently and Voluntarily)	H 1/5	L 1/5	*Other Professions (Denominational Connection)*	H 1/5	L 1/5
Lost Track of	9	31	Educators	21	2
Located or Retired	2	8	Editor	1	0
Withdrawn	4	3	Executive and Social	8	5
Layman or Business	2	1		30	7
	16	43			

TABLE XXIV

SALARIES OF GRADUATES RECEIVING HIGHEST AND LOWEST GRADES

Amount of Salary in 1917 Min.	*Highest One-Fifth* Boston 98–93 %	Drew 99–96 %	Garrett 95–89 %	Total	*Lowest One-Fifth* Boston 75–87 %	Drew 80–91 %	Garrett 73–82 %	Total
To $599						1	2	3
600+					1	1	1	3
800+	3	2		5	2	3	1	6
900+					4	3	4	11
1000+	1	2	1	4	4	4	5	13
1100+	1	2	1	4		7	6	13
1200+	2	1	2	5	8	5	1	14
1300+	2	2	2	6	3	3	3	9
1400+	1	6	4	11	3	3	3	9
1500+	4	5	2	11	4	4	2	10
1600+	3	2	4	9	2	3	2	7
1700+	3	3	2	7			1	1
1800+	1	3	3	7	2	3	3	8
1900+	3	2		5	2	2	4	8
2000+	3	4	1	8	5			5
2100+	5	1	5	11	3	1		4
2200+	2	3	1	6				
2300+	1	1	1	3	1		1	2
2400+					1	1		2
2500+		1	1	2	3			3
2600+	2	1	1	4	1			1
2700+					1	1		2
2800+					1			1
2900+	1			1				
3000	5	2	4	11	1	1	1	3
3500+	3		1	4	1			1
4000+	—	2	1	3	—	—	—	—
No Record of Amount:								
Missionaries	4	4	3	11	5	3	5	13
Professions	12	10	8	30		3	2	5
All Others	15	13	19	47	18	19	21	58

Table XXIV shows general trends by another method. The salaries of all of the men in the pastorate or district superintendency of the Methodist Episcopal Church are printed annually in the General Minutes of the Denomination. For those pastors in the highest and lowest fifths of scholarship rank the figures of the 1917 Minutes were taken. The salaries of these men seem to fall naturally into six groups (each inclusive): $1,000 and under; $1,100 to $1,500; $1,600 to $1,900; $2,000 to $2,400; $2,500 to $2,900; and $3,000 or more. Fig. 12 shows the trend of the two scholarship groups simplified to this coarser measure.

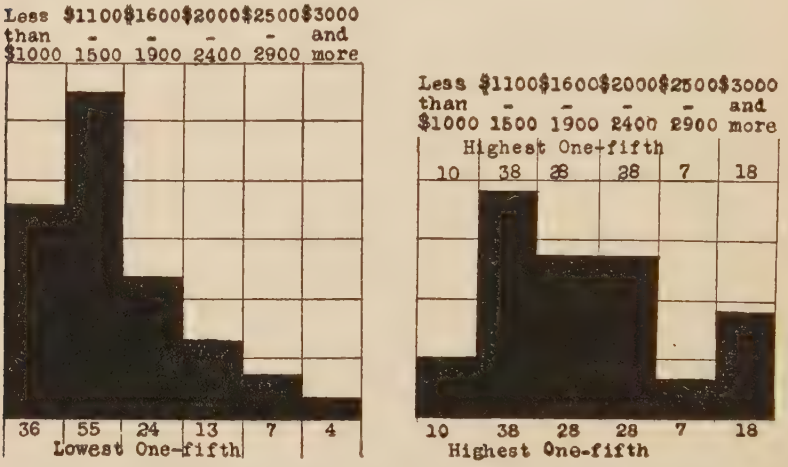

FIG. 12. Distribution of Salaries Received by Highest and Lowest Fifths in Scholarships.

There is, of course, much overlapping; but even in the graphs of the schools taken separately a distinct trend is shown, and it emerges much more clearly in the totals. The mode of the highest quintile occurs between $1,400 and $1,600, with none receiving a salary below $800 and a group of 18 receiving a salary of $3,000 or more. In the lowest one-fifth in scholarship, three men receive a salary below $600; the mode is between $1,000 and $1,200 with only four receiving salaries above $3,000. None of this lower group received salaries of $4,000 or more, while three such salaries were paid to men in the highest group.

It is interesting to note Rice's results on "School Standings and

Salaries in Later Life." He found the coefficient between the two to be

(Pearson) $r = +.267$
(Unlike Signs) $r = +.277$

He divided his group according to scholarship into quartiles instead of quintiles. Calling the average salary of the first quartile 100 per cent, he found that the average of the second quartile was 87 per cent, of the third, 85 per cent, and of the fourth, 76 per cent. For reasons previously stated, the present study uses quintiles instead of quartiles. On that basis, calling the average salary of the first quintile 100 per cent, that of the fifth or last quintile would be 76 per cent.

The above data are for 268 individuals from contrasted quintiles. For 164 others no salary data were obtainable. Of these 164, 24 were on the foreign field, 35 were in professions, and 105 were among those retired, supernumerary, withdrawn, in lay occupations, or entirely lost track of. If the prominence criterion were to be applied, there would be something of a redistribution between those about whose salaries information was or was not obtainable. As a large proportion of the upper quintile men, whose salaries were not given, were college, university, and theological school presidents and professors, or prominent in social or executive work, the salary curve would, however, probably be but little altered from the direction in the cases quoted in Table XXIV.

In so far as salary received and general prominence measure the scope of an individual's influence and usefulness, it seems fair to conclude that there is a direct correspondence between an individual's scholarship grades during his theological course and his success in later life. There is evidently more than a chance relationship between low scholarship and withdrawal from the work of the ministry. The fact that they were "lost track of" precluded any possibility of ascertaining the reasons for the withdrawal of most of such cases. Absolute certainty in conclusions would require the knowledge of these reasons, and the study of an even larger number of cases would be desirable. But it seems a warrantable inference either that these men had chosen the wrong profession, or that some other influence, such as poor health, low vitality, or a lower grade of general ability, affected their achievement both in scholarship and in their later work.

3. Analysis of Data Obtained from Questionnaires

The most authoritative source of information regarding the graduates of the theological schools is that obtained from the

TABLE XXV

Physical Data from Ministers Sending Replies to Questionnaires

Age at Grad.	*No.*	*Height*	*No.*	*Weight*	*No.*	*Weight (Cont.)*	*No. (Cont.)*	*Proportion of Weight to Height*	*No.*
23	3	4′ 6″	1	108	1	163	2	17	1
24	10	5′ 0″	0	116	1	164	2	18	5
25	10	5′ 3″	2	120	2	165	24	19	24
26	26	5′ 4″	11	125	9	166	2	20	27
27	32	5′ 5″	8	126	1	167	4	21	34
28	33	5′ 6″	24	128	3	168	4	22	28
29	22	5′ 7″	41	130	10	170	15	23	46
30	35	5′ 8″	57	132	4	173	1	24	35
31	22	5′ 9″	47	134	2	174	1	25	24
32	22	5′ 10″	45	135	12	175	12	26	28
33	15	5′ 11″	28	136	3	176	1	27	10
34	13	6′ 0″	29	137	1	178	2	28	5
35	17	6′ 1″	8	138	3	180	15	29	5
36	6	6′ 2″	8	140	10	182	2	30	16
37	9	6′ 3″	2	141	1	183	1	31	0
38	6	6′ 4″	1	142	1	185	12	32	1
39	4	6′ 5″	1	143	5	186	2	33	1
40	2	Av. 5′ 8.9″	313	145	16	190	4	34	1
41	3			146	1	191	1	37	1
42	3			147	2	192	2	42	1
43	2			148	4	195	3	—	—
44	1			150	18	196	2	23*	292
45	1			151	1	198	1		
51	1			152	3	200	5		
—	—			154	2	205	2		
30*	298			155	13	210	3		
				156	1	212	2		
				158	5	215	2		
				160	23	220	3		
				161	1	225	2		
				162	4	240	1		
						306	1		
					Av.	161.5	298		

*Both median and mode.

graduates themselves. Questionnaires similar to the sample already given were sent to 975 men graduated from these theological schools and replies were received as follows:

	Boston	*Drew*	*Garrett*	*Total*
Class I (All tables in figures) . .	42	34	27	103
Class II (All tables, part in figs.)	47	34	41	122
Class III (Only part of tables) . .	33	24	28	85
Total	122	92	96	310

PERSONAL AND SOCIAL DESCRIPTION

Most of the 310 answered the questions relating to age, weight, height, and early environment, so that we have for about 300 men who graduated from Methodist Episcopal theological schools during the years 1902–1911, a picture, more or less representative of the ministry as a whole, of the physical type of men at present active in the Christian ministry, and of the physical environment which nurtured them. Table XXV gives the age at graduation, height, weight, and proportion of weight to height, of all the men who entered these items on their replies.

TABLE XXVI

A. Boyhood Environment

City	48
Village	62
Country	140
Country and Village	27
Country and City	7
Village and City	11
Village, City, and Country	14
Not given	5

B. Economic Environment

Struggle	133
Comfort	130
Ease	2
Partly struggle, Partly comfort	40

C. Combination of Community and Economic Factors

City and Struggle	17
City and Comfort	26
Village and Struggle	23
Village and Comfort	35
Country and Struggle	70
Country and Comfort	58

Physically this group of ministers varies from a height of four feet six inches to one of six feet five inches. More of the men are about five feet eight or nine inches than any other height and more of them weigh 160 pounds than any other weight. Their weight-height ranges from 17 to 42 with the mode and the median both falling at 23. It is interesting to compare these figures with Gowin's figures for executives in various occupations and the average height and weight of policy holders which he quotes. On pages 25–28 of Gowin's study[7] he gives in order of rank the average height and weight of leaders, for example:

Height Rank		*Height*	*Weight*	*Weight Rank*
1	Reformers	5′ 11.4″	181.7	17
2	Superintendents of Street Cleaning	5′ 11.3″	216.7	1
8	University Presidents	5′ 10.8″	181.6	18
16	Presidents, Religious Organizations	5′ 10.4″	169.8	31
28	Insurance Presidents	5′ 9.7″	175.2	25
29	Psychologists	5′ 9.7″	155.3	40
35	Anti-Saloon League Officials	5′ 9.2″	176.3	24
39	Publishers	5′ 7.9″	171.9	26
40	Musicians	5′ 5.6″	161.9	37

His figures are in averages rather than in medians. The average height of the ministers in this study sending replies is 5′ 8.9″, which places them a little above labor organizers and a little below manufacturers and lecturers, but quite typically in the class of "intellectuals." The figures which Gowin quotes for the average of all policy holders are 58.5 inches. This must be a misprint for 5′ 8.5″, so that the group of ministers would be less than a half inch above the average of their fellows and practically the same as Gowin's group of preachers in small towns, 5′ 8.8″.

	Height	*Dif.*	*Weight*	*Dif.*
Bishops	5′ 10.6″		176.4	
Preachers, Small Towns	5′ 8.8″	1.8	159.4	17.0
University Presidents	5′ 10.8″		181.6	
Presidents, Small Colleges	5′ 9.6″	1.2	164.0	17.6
City School Superintendents	5′ 10.4″		178.6	
Principals, Small Towns	5′ 9.7″	.7	157.6	21.0

[7] *The Executive and His Control of Men.*

The division between economic struggle and comfort in the homes from which the group came is almost exactly even in so far as it is specified. Forty of the men experienced both struggle and comfort at different periods in their early life. Only two look back on a childhood of ease, although two more speak of having had conditions of ease during part of their school days. As to the relation of the economic to the social environment, omitting the mixed cases in which an individual had both comfort and struggle and lived in various sized communities, 50 per cent of those living in the country specified hardship and struggle and only one third of those in the city so specify. Not quite half of those in the country look back to a childhood of unmixed comfort. Take it all in all, as far as the men who answered these questions can be taken as representative, the ministers who graduated from theological schools during the decade under consideration were of slightly more than average physique, acquainted with the small town and country social life and conditions, schooled in effort, and more often than not in the actual struggle with hardship.

TABLE XXVII

EARLY OPPORTUNITIES SPECIFIED

	No.	*Total*
Good School Advantages		127
Public schools	61	
High schools (including private schools, 3)	48	
Business college	3	
Night school	1	
College (in home town or way paid)	14	
Special Cultural Opportunities		24
Good libraries or good books	11	
Special music opportunities	5	
Special art opportunities	2	
Special travel opportunities	6	
Church Advantages		25
Nearby, attendance, church work, etc.	20	
Sunday Schools	5	
Good Home and Parentage		65
"Educated" or "college trained"	4	
Parents teachers	4	
"Culture"	4	

"Godly" or "spiritual" mother	8	
"Godly" or "spiritual" father	5	
"Godly" or "spiritual" grandfather	1	
Good parentage	18	
Parsonage home	19	
Only son	1	
One of large family	1	
Home Sympathy and Encouragement		23
Social Advantages		7
Ministers visited home	2	
Christian teachers	3	
Christian associates	1	
City and its varied life	1	
Physical advantages		38
Country life	13	
Ground for planting	1	
Outdoor sports and exercises	7	
Nature lore and woodcraft	6	
"Wholesome" environment	5	
Good health	6	
Special training in		30
Gardening or farming	6	
Mechanics	1	
"Self-reliance" and "accuracy"	3	
Business	2	
Managing others	1	
Earning	7	
"Hard work"	10	

TABLE XXVIII

Early Responsibilities Specified

Entire Self-Support		20
(1 at 7 years, 2 at 9, 1 at 11, 4 at 13, 4 at 15, 1 at 16, 3 at 18, 4 not specified)		
Partial Self-Support		14
(1 at 11, 2 at 12, 4 at 14, 1 at 15, 6 not specified)		
Responsibility for Home		61
Father ill	6	
Widowed mother	20	
(whole or part responsibility at various ages from 9 years on)		
Mother died	5	
Caring for younger members of family	17	
Care of invalid mother	3	
Confidant of parents, financial struggle	7	
Helping with mortgage	3	

Responsibility for Management		43
Farm (whole 7, part 11)	18	
Stock	8	
Stock farm	4	
Herding	4	
Store or grocery clerk	7	
Crews of harvesters	2	
Business and Labor Responsibilities		62
Laundry, milk and paper routes	3	
Newspaper and printing office	3	
Bookkeeping, office, banking and business	7	
Lumber woods, saw mill	1	
Machine shop	3	
Carpenter	2	
Farm (32) and Garden (3)	35	
Poultry, chores, etc.	8	
Responsibility for own education		99
Public school (whole)	1	
High school (whole, 18, part 5)	23	
College (whole, 33, part 9)	42	
Theological school (whole 28, part 5)	33	
Social responsibilities		23
Sunday school teacher	4	
Sunday school superintendent (age 16)	1	
Local preacher (age 22, 16)	2	
Epworth League president (1 at 18)	5	
Y. M. C. A. president	2	
High school class officer	2	
Teacher	5	
College tutor	2	

The outlook on life which these individuals gained in their boyhood environment is interestingly shown in their replies to the questions regarding special opportunities and responsibilities. Although thirty specified their opportunities as "none" and twenty-four said they had no special responsibilities during childhood, the majority seemed to have plenty of both. Tables XXVII and XXVIII give a summary of those which they most frequently specified.

A few quotations make these summaries even more vivid. Optimism is shown by regarding as opportunities "permission to work my way through school and college." "At 15, I was given the privilege of earning what I could,—did not have to help my parents."

"A grandfather who knew how to keep me at it from early till late." Another found that farm work afforded "physical exercise, meditation and thought." One cites as a special opportunity "an illness that threw my interests from mechanics (inherited), into the realm of religion. 'I know of no ancestor who was a clergyman." "Father and mother both lived until the family was grown." "Comparatively perfect use of all my faculties." "The opportunity to work my way through preparatory school, college and seminary with $80 as a starting fund."

Among the many references to opportunities through the home are such as these: "A Union Sunday school in a school house near our home gave me a religious inclination." Cultural opportunities are variously specified such as "refined and cultured home," "musical mother," "splendid German training," "serious-minded and industrious parents." "I worked for a man who belonged to a library club and was loaned some very good books through him." "Father was a bookdealer, so I had a wider reading than the village afforded most boys." A very few mention financial help from relatives or from church funds. One says that his opportunities were "None. Never saw a train till I was 12, never was in a city till 17." But another had a "900 mile trip in a wagon at eight." A very few mention Chautauquas, "World's Fairs," or summer conferences. Some speak of later opportunities, such as high school debating, Y.M.C.A. work, leading boys' camps, and serving as assistant to an unusually successful pastor. Two had European travel in later youth.

Comments on responsibilities indicate that few had a care-free childhood. One took "a man's place in the field from my 13th year." Another was "at home with mother while father was hundreds of miles away at work,—I was a little father to the family." One did not have a home after his fifteenth birthday; another had a constant struggle to keep himself in health. Another had "hard labor and no schooling between 10 and 17," while still another "left school at 11 and graduated from college and seminary after marriage." Many mention various financial responsibilities which seem to have involved some opportunity also, such as "Bought clothes with pig money," "Handling all the farm machinery while brothers did the other parts"; "Responsibilitity for buying and feeding stock"; "Walking three miles each day to attend a three-year high school"; "Regular tasks on farm as rapidly as strength permitted but no personal compensation till after 21"; wood-chopping, milking, getting drift

wood from river, factory work, errand boy, bookkeeper, iron molder, and a summary given by one, "All kinds of ordinary work for earning a living." As Table XXVIII shows, several were orphans or half-orphans. One took care of both parents (one for 20 years) till they died, and educated himself at the same time.

All in all, the impression is of ambition, hard work, moral ruggedness, and a certain tendency of the environment to individualize, rather than socialize the outlook of the majority. There was struggle, sometimes desperate struggle, against poverty and adverse circumstances which seemed to affect the individual or his immediate family, giving sympathetic understanding for their buffeted or discouraged fellows, but little background for coöperative social endeavor.

INDIVIDUAL INTERESTS AND ABILITIES

What kind of boys were they? What did they like best to do and what did they do best? Tables XXIX–XXXIV summarize the 100 complete answers received to the questions in Table I of the questionnaire. The ten characteristics in the table were chosen for three reasons. Some of them, like study with books, managing people, planning and inventing, and a certain amount of clerical work and bargaining, might seem to be desirable or at least useful in certain functions of the ministry. Others, such as experimenting, mechanical work, and observing facts in nature, would tend to show how wide in range were those interests which might be taken as the basis of "cultural" development. The interest in farm work might show whether the boys liked their environment and duties or sought the profession of the ministry as an escape from work that was distasteful. The interest in athletics and organized games might be expected to show something of the temperament and disposition of these individuals. Another reason for including seven of these characteristics is that they had already been made the subject of a study by Professor Thorndike and would thus afford a basis for comparing results with a different group.

The only thing which stands out without doubt and with little change during the grammar school, preparatory school and college ages is the fact that they liked to study with books. (See Tables XXIX, XXXI.) The other activities which more than 50 per cent of them place in the upper half of the scale of relative interest during grammar school days are, in the order named, athletics, farm

TABLE XXIX

Early Interests

Order	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Bargaining	4	2	11	5	11	10	11	14	12	20
Managing People	3	9	8	9	13	11	10	15	15	6
Studying Books	35	20	11	12	4	8	2	2	1	4
Experimenting		6	9	14	15	11	17	15	9	4
Planning and Inventing	4	9	8	7	11	13	16	14	12	6
Observing Facts in Nature	5	8	14	16	10	14	10	10	13	5
Clerical Work	2	4	3	8	7	8	11	13	16	28
Mechanical Work	12	13	6	12	10	8	9	12	11	7
Farm Work	15	14	13	19	12	10	5	3	4	15
Athletics	20	14	17	8	7	11	9	2	7	5

TABLE XXX

Early Abilities

Order	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Bargaining	4	4	7	11	7	9	14	13	13	18
Managing People		13	15	3	10	13	10	11	14	11
Studying Books	47	22	6	9	3	4	4	2	3	
Experimenting		4	13	10	16	9	18	13	9	8
Planning and Inventing	3	8	6	4	8	15	6	16	15	11
Observing Facts in Nature	6	8	11	8	15	10	15	12	12	4
Clerical Work	2	4	4	9	10	12	12	11	13	22
Mechanical Work	12	11	12	13	11	6	6	13	9	10
Farm Work	15	17	13	10	11	10	5	4	6	6
Athletics	11	10	13	15	8	13	10	5	6	9

TABLE XXXI

Adolescent Interests

Order	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Bargaining		7	7	12	5	13	8	16	11	21
Managing People	5	9	18	13	12	7	9	4	16	7
Studying Books	58	15	7	5	3	5	6		2	
Experimenting	2	9	5	18	14	10	9	21	8	4
Planning and Inventing	2	7	14	8	9	11	16	10	11	10
Observing Facts in Nature	3	8	9	17	15	6	19	8	9	6
Clerical Work	2	9	6	3	7	10	9	16	13	25
Mechanical Work	10	9	7	9	12	14	6	22	5	7
Farm Work	11	12	16	8	13	14	5	5	5	12
Athletics	11	15	12	9	10	12	13	5	6	7

TABLE XXXII

Adolescent Abilities

Order	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Bargaining	3	4	8	14	6	15	12	15	8	15
Managing People	3	9	18	13	14	3	7	13	15	6
Studying Books	55	22	7	3	5	5		2	1	
Experimenting	3	12	4	10	14	7	16	18	8	8
Planning and Inventing	3	2	13	6	8	14	16	11	14	13
Observing Facts in Nature	3	9	5	16	9	14	18	11	9	6
Clerical Work		7	12	9	6	10	12	12	11	20
Mechanical Work	7	8	6	12	14	6	7	13	16	11
Farm Work	21	15	11	4	13	14	4	3	4	11
Athletics	4	14	15	13	12	12	10	4	10	6

TABLE XXXIII

Present Interests

Order	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Bargaining		3	12	8	6	10	8	13	9	30
Managing People	34	35	8	11	4	4	1	3		
Study with Books	57	27	9	1	3	1	1			
Experimenting		2	10	12	7	10	12	14	19	14
Planning and Inventing	3	3	10	10	10	10	10	15	19	10
Observing Facts in Nature	2	9	19	15	13	13	14	6	8	1
Clerical Work	2	9	9	18	9	9	10	13	10	11
Mechanical Work		3	9	10	10	13	16	15	16	8
Farm Work	1	9	6	13	21	11	13	19	5	12
Athletics			9	6	13	19	17	10	13	13

TABLE XXXIV

Present Abilities

Order	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Bargaining	1	4	18	10	11	7	9	11	8	21
Managing People	30	33	10	10	7	3	4	3		
Study with Books	50	28	8	3			1			
Experimenting	1	2	4	9	17	17	9	13	15	13
Planning and Inventing	4	3	10	11	5	17	14	13	17	6
Observing Facts in Nature	1	7	18	17	12	11	14	6	8	4
Clerical Work	3	11	14	11	15	8	11	13	10	8
Mechanical Work	2	6	8	6	13	9	19	11	16	10
Farm Work	1	9	8	13	14	10	8	14	10	13
Athletics			4	11	9	15	13	14	14	20

work, mechanical work, observing facts in nature and managing people. By the high school period the interest has shifted somewhat so that while athletics and farm life divide the place next to books, managing people is a close third and the interest in mechanical work and nature lore is slightly waning. They do not seem to have been a particularly experimental or inventive group, while bargaining and clerical work are generally in the lowest places in their interest.

Quite evidently that original trait which is the dominant influence in steering youth toward the profession of the ministry is the love of working with ideas rather than with things. As the individual matures, his interest in the source of ideas and the means of working out ideas, people, increases till it equals and often surpasses the interest in the depositories of ideas, books. While even a casual inspection of Tables XXIX–XXXIV shows the permanence of the main interest, the permanence of other interests is also high. Using columns 3 and 7 of Table II of the questionnaire for example (interests during high school age and the present):

Taking the differences in the order of ranking, trait by trait, and recording the sum of those differences for each of the 100 complete cases, the average for all was 21.4. If there had been no change in the order of interest in the two periods this sum would in each case have been zero. If there were no relation whatever between the order of interests in the two periods (1 changing as frequently with 9 or 10 as with 2 or remaining at 1), this sum would on the average have been 33. To find the actual correlation a distribution table of the individual difference sums was made out, showing the median to be 20. Working this out (by the formula

$$r = 2 \cos \frac{\pi}{3} (1 + R))$$

the correlation coefficient of interests between high school age and maturity is found to be +.61.

What is the relation of interest to ability? Several said "the same." In many cases there was but slight difference in order of rank, though some expressed a high interest in activities in which they say they had little ability—such as athletics or mechanical work. Conclusions here await the arithmetical work of computing the correlations between each pair of columns.

Permanence of ability was measured in the same way, using columns 4 and 8 (high school and present ability) as representative

periods. The median (20) and hence the correlation +.61, were the same as between interests for the same period.

When the results of certain studies projected or now in process are available, it will be interesting and significant to compare the interests and abilities at the different age periods of such groups as engineers, lawyers, physicians, agriculturists, teachers, and industrial and commercial leaders with those of this group of ministers. For further conclusions of vocational significance it is necessary to postpone computations with the material now on hand until such parallel data are accessible.

It is clear that the men now in the ministry are there because of their original interest in ideas and in persons. As to other interests, Lowell's findings in his study of Harvard graduates in Law and Medicine seem to have some bearing. He found that there was no relation between interest as shown by courses chosen in college and ability as shown by honors in professional school, but a close relation between college honors and honors in professional school. Hence original interest and ability in dealing with objective facts such as natural sciences, mechanics, or business relations, should be no bar to interest and success in the Christian ministry. The needs of the profession would be more adequately met by the inclusion of men with such interests, and especially of those with inventive and experimental tendencies who should furnish leadership in finding, under new conditions of human life, new methods for accomplishing the fundamentally changeless purposes of the Christian ministry.

It seems probable that the trait here called "executive ability" is closely related to what the intelligence tests for adults call "general ability." The correlations of the four abilities with each other, with achievement in the various items of work in the pastorate, with educational, executive, and editorial work, and with grades in the theological seminary, point in this direction. This is a trait the degree of which can be determined early in an individual's life.

General Conclusions

It may therefore be said that some qualities associated with success in the Christian ministry include first of all a high general intelligence, and general ability to handle human problems and relationships, rather than more specialized traits. This ability can

be determined early enough in an individual's school life to select the promising candidates and present to them the possibilities of the ministry as a field of life work.

Certain intellectual traits correlated with high examination grades indicate the probability that the individuals possessing them will ultimately choose the field of higher education. Probably there is no better vocational preparation for a teacher in the theological seminary than such an institution itself. For other educational positions and for social, editorial, and executive positions in the church, some additional courses, probably in combination with other professional schools, should afford the necessary combination of religious motive and outlook and specialized skill.

In the pastorate itself, in addition to the "executive" or general ability, and the closely linked ability to preach forceful and convincing sermons, the quality most closely associated with success is a tireless sympathy and a tireless energy in meeting individual personal demands which make the good pastor. Under present conditions these abilities, which function in coöperative endeavor and in the personal relationships arising from organized social life, are shown by the preceding study to be more closely associated with success than is evangelistic ability in the sense of the ability to alter the habits and attitudes of mature individuals by intellectual and emotional appeal.

PART III

A STUDY OF ESTIMATED VALUES OF CURRICULUM SUBJECTS IN COLLEGE AND THEOLOGICAL TRAINING[1]

Introduction

In all professions the graduates of certain leading training schools have such a dominant influence on the ideals and standards of their associates and of the public that they may be said to a large degree to be making the profession. It is also true that all graduates, by their reactions and criticisms, are to a certain extent making the professional schools.

A great deal has been written about the curricula of professional schools of all kinds, and theological schools have received their fair share of attention. There is David Spence Hill's dissertation for the doctorate at Clark University in 1908, *The Problems and Education of the Protestant Ministry*. There are articles such as "The Theological Curriculum and a Teaching Ministry" by H. B. Robinson and "The Demands of Democracy upon the Theological Seminary" by F. A. Starratt (both in the *American Journal of Theology* for October, 1918), "The Seminary of Tomorrow" by W. A. Brown (in the *Harvard Theological Review* for April, 1919) and the two articles by Orlo J. Price, previously quoted. It is a fair summary of these and others, and of pertinent sections of more general discussions, to say that they deal with suggested changes from the standpoint of individual judgment and desires. Men in the thick of affairs in the pastorate, educators alert to the changing needs of the times, even laymen analyzing their needs and tastes which the ministers fail to meet, say, "This subject must be added, and this,—and this." Perforce other subjects would have to be

[1] This section did not form part of the original dissertation. It deals with the material returned in the second part of the questionnaire and is included to complete the study, and also because of the keen interest in the topic manifested by the respondents. As will be seen, the figures are complicated with too many unmeasured variables to admit of indubitable conclusions, but the general trends shown have value in clearing the ground for further study, and indicate its direction by the questions they raise.

dropped to make room for them, and each individual is ready to do away with those which he did not like or has not used.

In so far as this investigator could ascertain there has been heretofore no attempt to secure from any considerable number of professional men a statement, in terms susceptible of statistical treatment, of the positive and relative value of the subjects they actually did study. It would seem wise to gain such data as a preliminary to a practical policy either of "conservatism" of real fundamentals or of "radical" omissions of what may be proved to be outworn. As the college course should, ideally, form a firm foundation for later specialization, and its wide range of electives makes some principle of choice imperative, both college and theological curricula were included in the present study.

1. Source and Extent of Data

The questionnaires[2] sent to all the available graduates of the year 1902–1911 of Boston University School of Theology, Drew Theological Seminary, and Garrett Biblical Institute contained blank tables (Tables II and III) which provided space for the numerical valuation of the courses included in the curricula of those institutions as printed in their catalogues during those years, and of the main groups of courses offered in standard colleges and universities in that decade and the few years preceding. For the sake of inclusiveness and simplicity the titles were generalized to the utmost. For instance, "Languages, Semitic," would include the entire process of learning the grammar and vocabulary of Aramaic and Arabic, if such were offered, as well as of Hebrew; while the interpretation as distinct from the mere translation of the latter would come under "Exegesis, Hebrew." "Science, Biological," would admit the evaluation of anything from a general introductory course to advanced research in animal or plant histology. Not one particular section or semester but the general trend of the subject was considered to be the matter of importance. The following directions were given:

> Let the value to your subsequent life and activities of a class-room hour of a fundamental English course be a unit of measure, and call it 10. Estimate the comparative value (whether "practical" or "inspirational") in your ministerial life of each course taken in your college work, by a number in the blank space following

[2] See page 41 ff. and insert.

the appropriate heading, thus: if a class-room hour of Greek has had the same value as an hour of English, mark it 10; if twice as valuable, 20; if less valuable, 9 or less. If any course had no value to your life and work as a Christian minister, mark it zero. Place no mark after courses not taken.

In the same manner, mark the studies of your theological course with numbers indicating their value as compared with the same unit "10," as in Table II.

In all, 310 filled or partly filled questionnaires were returned.[3] The relative interest of these men in their own natural endowment and in the training they received may be seen by the fact that while only 103 sent replies to Table I sufficiently complete to be of use, 305 filled out Table III, and Table II was filled by 281. Some of these 24 men who did not fill in Table II were diploma graduates who had not taken a full college course, and others reported such a long interval between college and seminary that their memory for the former was less keen, or they omitted it for lack of interest.

These replies cover about one fourth of all the graduates of the period considered, and very nearly one third of those living and in the United States at the time the letters were sent. They are from a selected group in so far as willingness to answer a questionnaire is a basis of selection. Otherwise they must be considered representative of every form of work engaged in by the Methodist ministers in the United States. New England, the far South, the entire length of the Pacific seaboard, the Middle West and the Middle Atlantic States, the Rocky Mountain regions and the New Southwest, are all indicated in the post marks and letter-heads of the replies. The General Minutes show the writers to be stationed in great city churches, on the "Main Street" of towns, in rural circuits, in churches of all nations in cities east and west, in home mission fields, and in the offices of the great denominational Boards and publications. A few are from graduates preaching in other denominations. Hence the judgments on the comparative "value in their life and work as a Christian minister," of the various subjects studied in preparation, as shown in Tables XXXV and XXXVI, would seem to be a fair cross section of the judgments thereon of Methodist ministers who entered their work during the first decade of the twentieth century.

For comparative study it was possible to divide the data somewhat according to the classification used in Part II, as follows:

[3] See page 73.

	College Subjects	*Theological Subjects*
Executives	15	15
Editors	2	2
Educators	22	22
Highest Salaried Pastors (*i. e.*, in proportion from each school)	38	40
Lowest Salaried Pastors (ditto)	34	39
All other replies, including 1 (woman) pastor's assistant, 1 local preacher (business man) and several from other denominations	170	187
	281	305

2. Analysis of Total Ratings of Curricula

What did the figures mean to those who did the rating? The standard given them was chosen because the equivalent of a fundamental college course in English analysis and composition had been required of every one who entered a theological school, and some use of it in professional life must be obvious. The number 10 fits naturally into our decimal habits of counting. Certain strong tendencies were observable in the individual papers. Some used the 10 as a central point, grading an equal distance either side, from 0 to 20. Others thought in multiples: one-half as valuable was 5 and twice as valuable was 20. A very few matched digits with decades and placed 5 and 50, 2 and 80 as equidistant from the standard. Within these schemes of marking were seen other personal tendencies—to conceive of English as so fundamental that few subsequent studies could equal it in daily use and hence to mark nearly all the subjects 9 or less; or to think of English as so elementary that practically all the professional subjects were marked higher. A few showed high lights and bold contrasts, marking the favored subjects as 600 or 1000, and others as -25 or -100, with an explanatory note that they "had some value, but the waste of time was great." Some courageously owned up that they got very little out of their courses and gave all but a few subjects 0, 1, 2 or 3.

There was, on the whole, a general tendency to give the 10 to subjects that came up to a reasonable standard of conscious usefulness and hence to give that mark to most of the subjects. Some, on the other hand, carefully balanced between 7's and 8's, 18's and 19's, between 60's and 65's. Owing to space and type restrictions in

a page of this size these fine distinctions have been lost in the coarser grading into the nine groups: zero or less, 1–4, 5–9, 10, 11–14, 15–19, 20, 25–45, 50–100 or more.

A very real difficulty was brought out by several who said they found it impossible to evaluate the subject separated from the teacher's personality. For example, some gave a very low mark to college Greek and a very high one to seminary Greek and Exegesis, explaining that the actual Greek was little used but the inspiration of the later teacher or teachers was one of the most permanently "useful" contributions of the seminary course. So with other subjects; while one with an apparently unfortunate experience noted beside certain low ratings, "I give not what these courses ought to have been worth to me, but what they actually were worth"; several commented "Did not get enough of this," indicating interest in the subject matter itself.

The accompanying letters indicate that to some men the college period and the seminary period made a total contribution to growth in which the various courses blend indistinguishably. "Atmosphere, association, outlook,—these seem more significant to me than particular subjects studied" is the way one sums it up. Some who replied cordially stated that they were unable after the lapse of years to give any numerical ratings. One made his scale as follows: "The value of these years to my present success is in about this proportion: Three-fifths to my associations in affairs (athletic, social and executive relations with students, and earning way through); one-fifth to the strong personalities of half a dozen men apart from what they taught; one-fifth to the subjects taught."

One comment is full of insight. "I believe that certain training which might result in very high efficiency, if followed up after graduation, proves of very little value because the minister lets his study of the subject cease as soon as examinations are past.—Yesterday a city preacher who is not 'making good,' seeing in my hand a pocket Greek text—which I always carry with me, said: 'Have you kept up your Greek? I never could retain my interest in it.' He has depended on a good presence and a genial disposition to get somewhere and he has gone as far as he ever will, though he is comparatively young."

Yet with the inevitable differences in personal outlook and experience, in standards and proportions in rating, the massed judgments of three hundred men do show significant trends. One is the

TABLE XXXV

281 Theological School Graduates' Estimate of the Value of Subjects in Their College Curricula

	0 or —	*1 to 4*	*5 to 9*	*10*	*11 to 14*	*15 to 19*	*20*	*25 to 40*	*50 to 100*	*No Mark*	*Less Than Eng.*	*More Than Eng.*
English												
Analysis and Composition				281								
Literature	0	1	25	106	10	24	61	10	2	42	26	107
Languages												
Latin	4	26	132	82	4	5	13	4	1	10	162	27
Greek	4	23	96	66	9	24	26	13	3	17	123	75
French	9	44	53	14	1	2	0	0	0	158	106	3
German	11	45	107	20	2	4	5	2	1	84	163	14
Spanish or Italian	8	10	3	2	0	1	0	1	0	256	21	2
History												
Ancient	1	9	90	84	11	25	31	5	1	24	100	73
General	1	6	84	83	12	26	34	10	2	23	91	84
European	1	13	78	78	11	22	30	8	3	37	92	152
American	0	3	69	88	12	28	39	15	4	23	72	98
Mathematics												
Pure	18	33	114	66	5	12	8	5	1	19	165	31
Applied	15	24	76	29	3	6	6	4	2	116	115	21
Science												
Biological	1	19	77	41	8	15	16	4	4	96	99	47
Physical	2	25	86	49	8	17	13	5	3	73	113	56
Chemistry	8	33	104	45	5	8	5	2	3	68	145	23
Geology	4	19	81	57	8	8	14	5	1	84	104	36
Astronomy	4	10	72	38	10	10	11	4	4	118	86	39
Philosophy												
Introduction, History	3	13	60	65	5	12	26	10	4	83	76	67
Logic	1	16	84	88	10	19	25	4	8	26	101	66
Ethics	0	7	60	78	14	23	49	11	8	31	67	95
Psychology												
Descriptive	3	13	76	73	12	24	24	7	4	45	92	71
Experimental	2	6	42	32	6	17	11	6	5	154	50	45
Educational	3	4	43	41	7	20	20	7	2	134	50	56

TABLE XXXV—*Continued*

281 Theological School Graduates' Estimate of the Value of Subjects in Their College Curricula

	0 or —	*1 to 4*	*5 to 9*	*10*	*11 to 14*	*15 to 19*	*20*	*25 to 40*	*50 to 100*	*No Mark*	*Less Than Eng.*	*More Than Eng.*
Social Sciences												
Economics	2	12	87	54	16	13	18	6	4	69	101	57
Social Theory . .	1	6	43	39	11	16	11	1	2	151	50	41
Descriptive Sociology	2	4	50	41	10	19	17	2	2	129	56	55
Practical Sociology	1	5	50	44	7	29	24	9	7	105	56	76
Voice and Ear												
Music and Singing	4	8	48	62	8	16	16	9	2	108	60	51
Elocution, Oratory	4	10	51	81	15	23	44	15	6	32	65	103
Speaking and Debate	5	6	34	64	16	29	56	20	6	45	45	127

relative proportion for which "no mark" was given. This generally, although not always, indicates that in college the subject was not elected and in seminary not offered. Table XXXV reflects the accepted "classical course" which was the almost inevitable preparation for theological training. Almost everyone took Latin, Greek, and pure mathematics. For the elective "one modern language" few chose French and fewer still could have found Spanish or Italian in the colleges of that period. Biology and geology were less often elected than the more familiar (and perhaps theologically safer) physics and chemistry. Astronomy and applied mathematics were still more infrequent electives. At that period psychology and the social sciences were newer and less developed and music and singing were rather looked upon as "extras" than as legitimate credits toward a degree.

Table XXXVI shows the fact, confirmed by the catalogues, that it was only in the latter part of the decade studied that courses in religious education, psychology, social sciences, and the languages, religions and psychology of missions fields were offered in the theological schools. The other theological subjects with a large proportion of "no mark" were music and singing, public speaking and debate, "praxis" (sermons before classmates and professors), Biblical

TABLE XXXVI

305 Theological School Graduates' Estimate of the Value of Subjects in Their Theological Curricula

	0 or —	*1 to 4*	*5 to 9*	*10*	*11 to 14*	*15 to 19*	*20*	*25 to 45*	*50 to 100*	*No Mark*	*Less Than Eng.*	*More Than Eng.*
English												
Composition, Sermons	8	7	37	112	11	25	50	9	3	43	52	98
Literature	1	2	26	85	5	15	35	8	5	123	29	68
Languages												
Semitic	5	25	84	37	5	12	15	1	2	119	114	35
Greek	5	17	86	65	8	29	39	8	3	45	108	87
Oriental (and Phonics)	3	4	3	5	0	0	0	2	0	288	10	2
History												
Church and Institutions	0	7	73	84	20	38	36	11	5	31	80	110
Geography, Archaeology	1	12	76	45	4	19	15	5	3	125	89	51
Missions, Evangelism	0	8	60	60	12	21	34	7	5	98	68	79
Exegesis												
Hebrew	4	30	80	54	11	20	34	8	4	60	114	77
Greek	2	14	76	59	11	35	49	18	6	35	92	119
English	1	7	36	73	10	30	59	16	7	66	44	122
Doctrine												
History and Development	0	9	68	64	14	22	24	13	5	86	77	78
Systematic Theology	2	10	52	78	19	40	60	33	7	4	67	159
Apologetics	2	13	72	71	15	27	41	3	4	57	87	90
Practical Theology												
Denominational Polity and Administration	6	17	82	65	10	18	20	7	3	77	165	58
Parish and Pastoral Problems	3	16	74	65	20	24	35	10	6	52	93	95
Homiletics	2	14	17	82	19	34	45	16	5	18	86	119
Praxis	8	12	33	24	4	12	16	1	1	194	53	34
Comparative Religions												
History and Philosophy of	0	10	63	65	10	35	24	8	5	85	73	82

TABLE XXXVI—*Continued*

305 Theological School Graduates' Estimate of the Value of Subjects in Their Theological Curricula

	0 or —	*1 to 4*	*5 to 9*	*10*	*11 to 14*	*15 to 19*	*20*	*25 to 45*	*50 to 100*	*No Mark*	*Less Than Eng.*	*More Than Eng.*
Psychology of . .	1	5	39	39	1	5	21	11	5	178	45	43
Relation to Missions	0	5	41	40	6	18	18	4	4	169	46	50
Social Science												
Social Theory . .	0	7	51	46	11	17	13	9	3	148	58	53
Problems and Laboratory	1	6	24	35	6	21	15	9	4	184	31	55
Religious Education												
Educational Theory	0	6	27	29	2	9	10	7	4	211	33	32
Educational Material	0	4	22	17	2	4	7	6	3	240	26	22
Problems and Laboratory	1	2	9	13	3	8	10	4	3	252	12	28
Voice and Ear												
Music, Singing . .	5	16	53	78	5	19	17	8	3	101	74	52
Elocution, Oratory	5	17	51	85	11	32	44	17	4	39	73	108
Speaking and Debate	5	7	30	50	6	23	32	13	4	135	42	78

geography and archaeology, Semitic languages, and the history of missions. Most of these were either not given in one or more of these schools or were extra electives.

Next in impressiveness is the group of subjects most closely "equal to English" in valuation. On the whole the mark 10 may be taken as a sort of "O.K." of acceptability as a fundamental in the curriculum. Those thus accepted by any considerable proportion of the men (although in several cases still larger groups differed with them) are, in the college, English literature, Latin, history, philosophy, oratory and speaking; and in the seminary, sermon writing, homiletics, oratory and music, church and missionary history, the doctrinal studies and English exegesis.

Very interesting are those rated "of less value" than English by more than considered them "of greater value" (omitting the

10's or "equal value" in this comparison). In college all the languages, mathematics and sciences, political economy and logic, seem thus rather overwhelmingly in disfavor, with the scale tipped on the negative side also in social theory, ancient and general history and history of philosophy. Individual comments may or may not explain these tendencies. "I never had enough (of German) to become proficient." "I could have become greatly interested in mathematics had I elected a career that required the practical use of mathematics." "The natural sciences interested me but I labored under the idea that the ministry required 'classical preparation.'" "Elementary economics interested me greatly in my junior year in college. I therefore elected largely in economics and sociology during my senior year, only to be disappointed. Both books and teacher in this department were too abstract and too remote from the world of real men and women to be of any great value." In theological courses also the languages appear to be in general disfavor, shared by Hebrew exegesis, and the apparently "practical" subject of denominational polity and administration.

Those declared by one or more to be of "no value" or a "waste of time" include all the college subjects except English literature, American history, and ethics, with especial emphasis against mathematics, modern languages and chemistry. In the seminary all that escaped the complete condemnation of one or more were the history of church missions and of doctrine, the history of philosophy, and educational theory and material. Those in greatest disfavor as "sheer waste" were praxis, denominational polity, the ancient languages and the work in music, oratory and public speaking (which also were given some of the highest valuations)

3. Analysis of Comparative Ratings by Groups

The best available way to compare the ratings as a whole with the ratings in each subject of the various groups, is by the use of medians. (That is, in each case the middle mark is chosen. For example, if 183 men marked systematic theology, the 92nd rating would have 91 below and 91 above. If only 86 men marked music, the rating would be midway between the 42nd and 43rd marks.) As the totals show, the range is so wide and the number of 10's so great that most of the medians occur in the 10's, making the differences show only by decimals.

Answers to all the tables have been received from 2 editors, 15 executives and 22 educators. The men from each theological school receiving the lowest and highest salaries of those sending replies total 40 in the two groups. Thirty-eight high-salaried and 34 low-salaried pastors filled out the tables regarding the college subjects, while 39 high-salaried and all 40 of the low-salaried pastors gave ratings on the theological subjects. Of the remainder of the replies, 170 marked the college subjects and 187 the theological subjects. The median ratings of each of these groups are shown in Tables XXXVII and XXXVIII. Some apparent discrepancies between the medians for the individual subjects and those (at the left of each column) for the larger groups, such as languages, sciences, exegesis, etc., are due to the small number of marks on some of the subjects. For instance, if but three marked Spanish or Italian, the median might be 30; whereas the number in that group marking Latin might be 22. It is to be remembered that these marks are not averages.

As is to be expected, the marks do not differ widely between the groups. It is, however, distinctly noticeable that the educators and high-salaried pulpit men mark English literature higher than do the other groups. The educators also marked the sciences in general, especially the biological sciences, higher than did the rest, although the editors and executives placed these studies almost as high as English. All placed the languages low, with the exception of Greek; the executives are those who mark the languages lowest of all. Mathematics also are marked low by all groups. In general, they are marked highest by the lowest salaried group. The executives are the only ones who rate applied mathematics higher than pure mathematics. Most of the college graduates of that period were told that mathematics was essential to the curriculum because "it developed the logical faculties" and most of them believed it! Since the theory of "transfer of training" that this implied has failed to prove itself under the experimental searchlight, there seems to be a strong tendency, by those who disliked the subject, to discredit it altogether. The various branches of psychology were marked slightly higher by educators than by others, with the exception of experimental psychology, which is greatly favored by executives. The comparative attitudes toward the social sciences are interesting. The educators and the average pastors tend to rate these subjects about alike (10.6),

TABLE XXXVII

COMPARISON OF MEDIAN RATINGS OF COLLEGE SUBJECTS

	2 Editors and 15 Executives	*22 Educators*	*38 Highest Salaried Pastors*	*34 Lowest Salaried Pastors*	*170 Other Graduates*
ENGLISH					
Literature	10.00	15.50	13.50	10.70	10.95
LANGUAGES	7.90	8.95	8.40	8.35	8.16
Latin	8.00	8.50	9.30	8.00	9.13
Greek	8.50	9.50	10.40	10.50	10.15
French	5.00	7.50	5.90	5.50	5.18
German	7.70	8.50	5.60	5.90	5.70
Spanish or Italian	1.00	3.00	2.00	8.00	1.90
HISTORY	10.60	10.20	10.70	10.54	10.50
Ancient	10.40	10.20	10.80	10.50	10.27
General	10.60	9.50	10.70	10.70	10.40
European	10.80	10.20	10.70	10.70	10.32
American	10.80	10.40	12.00	10.70	10.60
MATHEMATICS	8.30	8.40	7.50	8.45	8.03
Pure	5.50	8.40	9.00	9.00	8.30
Applied	8.50	8.50	5.70	7.00	7.90
SCIENCE	9.80	10.10	8.70	8.75	8.80
Biological	9.50	12.50	8.60	9.00	9.80
Physical	10.30	10.30	10.20	8.00	8.90
Chemistry	9.50	18.80	6.50	7.00	7.86
Geology	9.50	10.50	10.20	9.50	9.20
Astronomy	9.50	10.30	10.30	8.50	9.55
PHILOSOPHY	10.60	10.70	10.40	10.20	10.50
Introduction, History	10.60	10.80	9.60	9.50	10.38
Logic	10.00	10.50	10.20	10.30	10.34
Ethics	11.00	10.90	10.80	10.30	10.78
PSYCHOLOGY	10.20	10.70	10.40	10.45	10.40
Descriptive	9.50	10.80	10.30	10.50	10.36
Experimental	12.50	10.70	10.70	10.40	10.40
Educational	9.50	10.50	10.90	10.70	10.52
SOCIAL SCIENCES	11.00	10.60	10.46	10.00	10.60
Economics	12.00	10.20	9.70	10.20	10.09
Social Theory	9.00	17.00	10.20	9.00	10.40
Descriptive Sociology	10.00	10.50	10.40	9.00	10.60
Practical Sociology	15.50	13.50	11.00	10.50	10.65

TABLE XXXVII—*Continued*

COMPARISON OF MEDIAN RATINGS OF COLLEGE SUBJECTS

	2 Editors and 15 Executives	*22 Educators*	*38 Highest Salaried Pastors*	*34 Lowest Salaried Pastors*	*170 Other Graduates*
VOICE AND EAR . . .					
Music and Singing .	10.30	10.70	10.66	10.35	10.40
(Speaking subjects only)	10.70	10.70	12.50	10.80	10.90
Elocution, Oratory .	10.50	10.50	10.80	10.80	10.77
Speaking and Debate	10.70	10.50	15.20	12.50	15.00

while the median of the executives for the whole group is 11, and for the low-salaried pastors barely 10.

There is a wider divergence regarding the voice and ear groups than in the others. These all receive more than their share of zeros, have as many 10's as most of the other subjects and receive many of the highest ratings. Some individuals indicated that the work was taken in college during the theological course, others that special training in outside schools of oratory had been taken. The high-salaried pastors seemed to have made the most of this in their college course, and the executives during theological school. Perhaps this indicates a selective trend.

Systematic theology and ethics have high ratings. These are apparently of nearly equal value to all groups except that the executives place ethics higher and systematic theology lower than any of the other groups. Systematic theology seems to win its highest regard from the educators and from the low-salaried pastors.

The numerous comments from the earlier graduates expressing regret that psychology, religious education, and social science were not available in their day, and conviction that they would have been "immensely valuable," are in strange contrast to the many low ratings and even zeros given by those who did take them. Perhaps these differences are quite explicable when one reads the earlier textbooks and realizes that in the days first following their introduction the methods were almost invariably abstract rather than experimental.

TABLE XXXVIII

COMPARISON OF MEDIAN RATINGS OF THEOLOGICAL SCHOOL SUBJECTS

	2 Editors and 15 Executives	*22 Educators*	*39 Highest Salaried Pastors*	*40 Lowest Salaried Pastors*	*189 Other Graduates*
ENGLISH	10.70	10.50	10.82	10.70	10.30
Composition, Sermons	10.60	10.30	10.80	10.80	10.77
Literature	10.90	17.50	12.50	10.70	10.70
LANGUAGES	10.20	10.50	8.70	8.90	9.80
Semitic	9.50	8.80	7.00	8.90	8.10
Greek	10.60	12.00	10.40	10.20	10.32
Oriental and Phonics	8.00	5.00		10.00	4.00
HISTORY	9.90	10.60	10.60	10.40	10.50
Church and Institutions	9.50	14.00	10.80	10.50	10.61
Geography, Archaeology	9.50	10.20	5.80	9.70	10.16
Missions, Evangelism	13.00	10.30	10.20	10.70	10.61
EXEGESIS	9.40	12.50	10.67	10.60	10.70
Hebrew	9.50	12.50	10.40	8.70	10.01
Greek	9.40	15.40	10.80	10.40	10.74
English	9.50	10.80	10.90	12.00	13.50
DOCTRINE	9.30	10.80	10.70	10.80	10.60
History and Development	9.40	10.70	10.50	10.30	10.45
Systematic Theology	9.40	15.40	12.50	15.50	12.33
Apologetics	9.50	10.80	10.30	10.70	10.58
PRACTICAL THEOLOGY	7.50	9.80	10.30	10.60	10.50
Denominational Polity and Administration	7.50	10.20	10.30	10.20	10.21
Parish and Pastoral Problems	9.70	10.30	10.20	10.70	10.73
Homiletics	10.80	10.10	10.80	10.90	10.80
Praxis	7.50	8.50	8.50	8.50	10.46
COMPARATIVE RELIGIONS	10.90	15.40	10.50	10.50	10.40
History and Philosophy of	10.90	13.00	10.55	10.40	10.43
Psychology of	10.70	20.50	10.40	10.50	10.42
Relation to Missions	12.50	12.50	10.60	10.90	10.46

TABLE XXXVIII—*Continued*

COMPARISON OF MEDIAN RATINGS OF THEOLOGICAL SCHOOL SUBJECTS

	2 Editors and 15 Executives	*22 Educators*	*39 Highest Salaried Pastors*	*40 Lowest Salaried Pastors*	*189 Other Graduates*
SOCIAL SCIENCE . . .	13.50	12.50	10.60	10.30	10.60
Social Theory . . .	10.90	11.00	10.60	9.00	10.40
Problems and Laboratory	17.50	15.00	10.60	10.50	10.89
RELIGIOUS EDUCATION .	15.00	17.50	10.40	10.90	10.30
Educational Theory .	15.00	10.90	10.40	10.60	10.28
Educational Material	10.60	30.00	9.00	10.80	10.23
Problems and Laboratory	25.00	20.00	15.60	12.00	10.71
MUSIC AND SINGING .	10.70	11.00	10.70	8.70	10.36
VOICE AND EAR . . .	12.00	10.60	10.60	10.70	10.80
Elocution, Oratory .	10.80	10.60	10.60	10.70	10.80
Speaking and Debate	15.00	10.60	10.50	10.90	10.91

4. SUMMARY AND CONCLUSIONS

The opinions of this body of men, based on their experiences in various fields of the Christian ministry for the last one or two decades, are interesting and significant, but not conclusive. The ratings raise as many questions as they answer.

History, literature, systematic theology and ethics seem to prove their right to a fundamental place in college and theological curricula. The answers indicate a definite desire that these shall be extended and vitalized. Many of the letters and comments indicate a conviction that much can be sacrificed if vital contact with the real problems of the ministry is established during student days so that the problems may be solved with the help of strong and stimulating personalities in the faculty. Knowledge of people and of life as well as of subjects and theories is one of the insistent demands volunteered in the replies to the questionnaires.

Perhaps physics and chemistry do have less to do with people than with the commercial and industrial professions, but geology

and astronomy lie at the base of our whole view of the universe in which we live. They have been used by some preachers to give to common people, overwhelmed with pettinesses and with the pressure of crowded days, the stimulus of infinity and the "sweep of cosmic processes." Spiritual life is certainly *life*, and its laws of growth are bound up with all that biology has discovered. Also, community health, freedom from social diseases, education in effective use of the body for spiritual ends and "fullness of life" are all dependent on this fundamental science. What is the reason that so many ministers find it of no "practical" use?

When all the nations are with us, why are the modern languages placed so low by every group? The men who answered quite evidently have not to any great extent used what instruction they have received. Most of them have been continuously in pastorates among wholly English speaking people. But if the instruction had been accompanied by everyday use in speech instead of being used solely in reading a certain amount of modern classics, would they have found opportunity to use these modern languages in the communities they served? The background of the peoples who are with us or to whom our daily relations extend in other countries is essential to ministers of to-day far more than to those of ten years ago. This should be gained from the history of missions and of modern Europe and from the study of the religions and philosophies alien to us.

Is religious education to be a distinct field, a profession allied to but separated from the ministry? Should not the science of teaching be essential to the preacher in preparing his sermons? Should not a pastor know the psychological laws of comforting and encouraging, and the instinctive reactions which he must stimulate in those who are threatened with moral collapse?

One thing seems to stand out beyond all others: the value of a subject depends directly on the way that it is taught, and the recognized values are in that teaching which stimulates the student to face his own problems in the practical work of the ministry and develops in him the ability to do his own thinking in the principles underlying his whole choice and method of work. It would take the reproduction of all the individual replies to show, what is lost in the summaries and averages and medians of the tabulated figures, the influence of personality and method on the value to any individual of any subject matter. There is a difference in the value

of the subjects themselves, but there is a greater difference in the chance to get the values they have.

Different personalities desire and require a wide range of electives, and there is evident a distinct tendency among theological schools, in the years since those included in this study, more widely to extend that range. Some are even omitting the requirements for the ancient languages. The opinions here tabulated indicate that further changes along these lines and still wider inclusions of any subjects which may have bearing on individual and community life will be valuable in the training of the Christian minister.

One of the chief conclusions established by the earlier portions of this study is that success in the ministry depends more on general ability to work with both people and ideas than upon any specific intellectual interest or group of interests. Men with the experimenting, inventing, and executive types of mind are as much needed as the "book-minded." It is the latter who now get the highest grades, and are the most appreciative of the present curricula. (Compare the ratings given by the educators in Tables XXXVII and XXXVIII with their grades in Tables XIII–XVI.) What kind of curricula would attract and prepare for success the types of able men who have seldom entered this field?

VITA

Mary E. Moxcey was born in Atchison, Kansas, February 2, 1875. Her early education was received from her parents and from about three years in country schools in New York and Pennsylvania. Preparation for college was completed at a private school in Athens, Pa., in 1891, with a further year of study and teaching in the same school. From 1893 to 1897 was spent at Syracuse University which conferred the degree of Ph.B. (*magna cum laude*) in 1897. She was elected to Phi Beta Kappa. After one year of graduate work, Oberlin College conferred the degree of M.A. in 1907. Graduate work in Columbia University has been pursued from 1913–1915, 1916–1917, and 1921.

Her teaching experience includes two years in public schools in New York State, two in Oxford College, Oxford, Ohio, one in the New York Training School for Christian Work, and one in Boston University School of Theology, in the Department of Religious Education. Two years, 1900–1902, were spent as Inspector for the New York State Board of Charities, and from 1902–1911 in departmental and general executive positions in the Young Women's Christian Association. Since 1919 she has been an assistant editor in the Sunday School Publications of the Methodist Episcopal Church.

Publications include:

A Study of Compliance with the Public Health Law in 147 Children's Institutions, published by the New York State Board of Charities, 1902.

Girlhood and Character, Abingdon Press, 1916.

Leadership of Girls' Activities, Abingdon Press, 1919.

Physical Health and Recreation for Girls, Abingdon Press, 1920.

Good Times for Girls, Abingdon Press, 1920.

Teachers' Guide to (Meyer and Kennedy's) *The Training of the Devotional Life*, Smith and Lamar, 1920.

Also numerous educational articles and series in the various periodicals of the Methodist Episcopal Church and in the *Association Monthly*.